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Education Consortium for the Advancement of STEM in Egypt (ECASE)

QUARTERLY PROGRESS REPORT

OCTOBER - DECEMBER 2014



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Acronyms

21PSTEM	The 21 st Century Partnership for STEM Education
ACT	American College Testing (exam)
AIP	Annual Implementation Plan
AUC	American University in Cairo
BOT	Board of Trustees (school)
CGP	College Guidance Program
COP	Chief of Party
DCOP	Deputy Chief of Party
ECASE	Education Consortium for the Advancement of STEM in Egypt (USAID)
EGP	Egyptian Pounds
GILO	Girls' Improved Learning Outcomes Project (USAID)
GOE	Government of Egypt
HR	Human Resources
ICT	Information and Communications Technology
MAP	Management Assessment Protocol
M&E	Monitoring and Evaluation
MOE	Ministry of Education
MOHE	Ministry of Higher Education
NCEEE	National Center for Educational Evaluation and Examination
PARLO	Proficiency-based Assessment and Reassessment of Learning Outcomes
PAT	Professional Academy of Teachers (MOE)
PD	Professional Development
PMP	Performance Monitoring Plan
SCOPE	Standards-based Classroom Observation Protocol for Egypt
SEPUP	Science Education for Public Understanding Program
STEM	Science, Technology, Engineering, Math
STTA	Short Term Technical Assistance
TIES	Teaching Institute for Excellence in STEM
TFI	The Franklin Institute
TILO	Technology for Improved Learning Outcomes (USAID)
WL	World Learning
US	United States of America
USAID	United States Agency for International Development

1. Summary of activities

This Quarterly Progress Report (QPR) details activities and accomplishments of the USAID – funded Education Consortium for the Advancement of STEM in Egypt (ECASE) Program, from October 1, to December 31, 2014. The report discusses work undertaken by World Learning working collaboratively with consortium partners (21PSTEM, TIES, and TFI).

- **Visit to Ma'adi STEM School** - On October 14th, 2014 USAID Assistant Administrator Mark Feierstein, Charge d'Affaires Mark Sievers; USAID Mission Director, Dr. Mary C. Ott; Ms. Julie Fossler, USAID Press; accompanied by Ms. Hala ElSerafy, ECASE's Agreement Officer Representative, visited the STEM Secondary School for Girls in Ma'adi. The purpose of the visit was to witness achievements to date implemented by the ECASE project on the ground and meet with the school's students and teachers. The girls at the Ma'adi school did an amazing job leaving a great impression on everyone showcasing their Capstone projects and speaking to the uniqueness of their STEM schools and delegates from the student body accompanied the visitors throughout the school to view the science labs, the Fab Lab and other school facilities. In the Fab Lab the students showed their proficiency on the equipment available in the lab and produced small items that were shared with the visitors as souvenirs.



- **Visit to October STEM School** - On December 2nd, 2014, USAID Mission Director Dr. Mary C. Ott visited the 6th of October STEM School for Boys to check on the implementation of the ECASE's activities and to meet the students and see their projects. She had visited the Maadi school for girls before but never the October school for boys. She spent considerable time discussing capstone project ideas with the students and learning about their experience in the school.



During the visit, the school principal, the Head of STEM Unit and ECASE project representative introduced the school and gave the lead to the members of the student union. A group of five students led the tour, starting with the physics, biology, chemistry labs, and the Fab Lab in which the students showed how they integrate the use of equipment in their projects. Dr. Ott checked the capstone projects produced by the students from all grade levels and several groups presented their projects and explained their approach. The students demonstrated a great knowledge and understanding of the STEM curriculum through their projects which left Dr. Ott impressed with the choice of problems tackled by the students in each project. The students displayed a short movie about the school and its achievements to date followed by a tour of the classrooms, the library, the computer and the linguistic labs. The visit ended with an

open and fruitful discussion of the curriculum, the capstone projects, and the STEM school system and the facilities.

- ***Fab Lab Training*** – ECASE Project assembled a training plan that was approved and implemented this quarter at both Ma'adi and 6th of October that focused on two assurances; (1) every student has access to Fab Lab training, and (2) foundational training is delivered by professional trainers. The student training was divided into three tiers from basic to advanced. Fab Lab Managers began training and then were joined by a Fab Guru (Fab Lab expert in tools, use and training) from Fab Lab Barcelona for one week to check on progress and provide help with training. The Ma'adi Fab Manager trained most of the school to the Tier 1 training level and expects to be finished with the remaining tiers by the end of the first semester of 2014-2015. 6th of October expects to complete Tier 1 training by the second semester of 2014-2015.



- For the first time eight MOE Technology Development Center (TDC) members joined the training and benefited from the presence of the expert trainer. These were individuals selected by TDC to have the appropriate background and interest in Fab Labs to receive the training and position them to further upgrade their capacity and alter help the schools. The idea is to continue to upgrade the capacity of TDC as a Fab Lab partner within the Ministry to be responsible for Fab Labs after ECASE. This is viewed as a means to sustain the Fab Labs and help transfer their ownership to the Ministry.

- ***STEM Unit Meetings*** – Weekly STEM Unit meetings are taking place, with associated Task Force meetings regularly held as planned. Several meetings were held over the last quarter and are described later in the report. Ultimately, the ECASE team plans to work with the STEM Unit to approve and formalize content for replication to other STEM Schools in Egypt through Local STEM Units. To begin the process of thinking, the ECASE team provided training on the Design Blueprint, the model by which replication can occur. During this training, STEM Unit members were engaged in the process of creating Design Features, Success Indicators, and Action Items. Further collaboration will occur over the next quarter as the New School design process begins.



- **Mid Terms** – ECASE Project focused on the development, administration, scoring, and feedback sessions for the midterm examinations for Grade 1 and 2 students. Midterm exams were developed by the MoE content assessment experts and submitted to the assessment committee in the USA for relevant feedback. At the beginning of this process, assessment committee members helped the MoE establish a framework for the midterm exams. Once these STEM course midterms were developed and administrated to the students of both schools, the exams were submitted to the ECASE Assessment Committee for review and feedback. Included in the midterm exam package were the actual exams, item alignment to the course Learning Objectives (LO), analysis of each item for cognitive load, and the answer key. Assessment committee members from the appropriate content area reviewed this material and provided comment on the item alignment to course LOs, item cognitive demand and the designated answer. Following exam administration, the assessment committee's experts graded and analyzed the exams. Summary spreadsheets were produced with exam results and discussed with the MoE assessment members. MoE members commented during the feedback sessions and in subsequent meetings that they found these sessions extremely helpful. ECASE sees that these sessions upgrade the capacity of in country MoE personnel responsible for formative assessment in STEM schools and directly feeds into the project's deliverables.

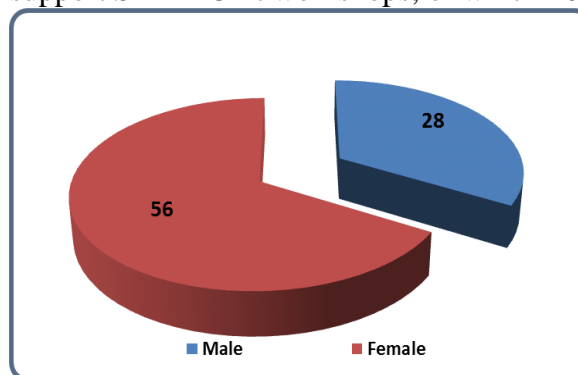


- **English Language Program** - The main objective of the English Language Program (ELP) is to improve the students' English Language skills in order to better understand the vigorous STEM curriculum. The ELP targets to engage the STEM students of grade level 1 & 2 in two of its courses; the 'Summer Camp' and the 'Afternoon English Language Class'. The program provides support in five levels; basic, pre-intermediate, intermediate, conversation, and academic. One of the most interesting outcomes from the conversation level is that the program organizes an event called 'STEM's Got Talent' in which the students present their talents in acting, poetry reading, singing, etc. in English in front of their teachers and other students. This event is conducted at the end of the 'Afternoon English Language Class' in order to honor all the students who presented their talents and participated in the event with a 'Certificate of Participation & Attendance'. This certificate indicates that its holder has been engaged in the program and has achieved a level of improvement that enabled her/him to present a certain talent in English language.



The STEM students benefit from the successful improvement they achieve in their English language skills as a result of attending the ELP. They also admit that the ELP is very important for them as it helps them better excel in their research, projects, STEM subjects, social life, universities admissions, and over all knowledge. (**Annex I**)

- **Training** – ECASE project continued to support STEM Unit workshops, of which 10 were held successfully during the last quarter. Additionally eight members of the Ministry of Education Technology Development Center (TDC) participated in Tier 1 Fab Lab training over three days at 6th of October. Finally the project trained about 22 professors and STEM Unit members on Capstone evaluation. The total number of trainees was 84; 56 males and 28 females. (**Annex II**)



2. Activities leading towards accomplishment of Program objectives

2.1 Project Management

During this quarter, the ECASE team has transitioned from a focus on implementation to enabling transfer of content/knowledge to support sustainability. Going into year 3, the focus has shifted to enabling transfer of work to the local counterparts, while also opening additional schools by replicating the ECASE STEM Model. During this transition, the team has focused on documentation and assessment of objectives. As such, the team has focused priorities to determine the best methods to deliver the STEM Model for replication. The following activities occurred during the last quarter as a means to enable this goal:

- **Leadership Meeting**– The leadership team was hosted in Philadelphia, October 26-28, 2014, to discuss the overall plans for Year 3 and to further define and plan the task level details and work for the current year. To enable this activity, the team worked to discuss and communicate the full structure and approval process of the Ministry of Education, including the suggestion of Local STEM Units to support local replication of the model. Further, the team presented work done to date and discussed in detail the needed work moving forward and the required integration of activities across the team. Additional time was dedicated in the home office to finalizing the Year 3 AIP, which was submitted to USAID October 30, 2014.

- **Long-term planning of activities with STEM Unit** – As discussed during the leadership meeting, transfer to the MoE STEM Unit is critical to enabling local ownership and sustainability of the STEM Model. The ECASE team has been working closely to identify the critical topics to discuss with the Unit on a weekly basis during standing meetings. The team has created [STEM Unit agenda topics and plans](#) through the end of the semester and will continue to be proactive in this planning to assure all critical items are addressed in a timely fashion.

- **Plans for Local STEM Units/New Schools** – The idea of a Local STEM Unit that is supported by local governments in each new STEM school location was discussed during the leadership meeting. The assumption that development will occur with these local units has been part of the planning process for new school development activities. At the time of this report, the future of the Local STEM Units and new schools was still pending, though at the time of the leadership meeting in October 2014, it was discussed that the AOR will coordinate visits with local Undersecretaries in the three governorates and inform ECASE accordingly and that there would likely be three new schools opening in September 2015.

- **Google Drive Updates** – The Google platform was redesigned last quarter with a portal interface linking to the Google Docs. This platform is highly integrated with the work of the ECASE team and has been created to enable the final Design Blueprint for all work, including the development and repository of all content, manuals, schedules, calendars, training, etc. In addition, the platform has been designed to enable surveys, display of the curriculum, lesson plan creation, and capstone development/journal scoring and completion. During this quarter, the ECASE team was informed that the STEM Unit may require content to be stored in Microsoft One Drive. The process for such a change is being reviewed in collaboration with TDC. Online meetings were held between the ECASE person responsible for GD and Mr. Waleed Fakharany from TDC to explore the possibilities of the MoE owning this work and perhaps transferring it to One Drive or hosting it itself.

- **Design Blueprint** – The Design Blueprint has been positioned as the final “handover” of the STEM Model, housing all of the STEM School Design Features and Success Indicators. The Blueprint was discussed during the leadership meeting and again with the MoE STEM Unit in December 2014, and will be the primary tool for replication of the STEM Schools.

2.2 Project Activities

This section summarizes key accomplishments against the new AIP for each objective area. All project activities are part of a larger iterative process and many aspects of individual activities overlap with other activities. The summary, below, is presented according to the most recent AIP presented to USAID. Activities submitted as part of the AIP to USAID are provided in “**bold**”.

Objective 1: Increase student interest, participation, and achievement in science and mathematics with special effort to underrepresented groups such as girls and economically marginalized students

During last quarter, a manual was updated and enhanced to support *implementation of an admissions system that is criteria-based, inclusive, and transparent (Activity 1.1)*. As of this quarter, the manual presents admission criteria that are more comprehensive and primarily aim to select students talented in math, science and/or technology rather than achieving students. These new criteria need to be presented to the STEM Unit for review and approval. But, moreover, the MoE needs to be convinced with these new criteria in order to issue a new decree that permits such criteria to be used as the basis for student selection. This needs to be prepared and issued

before the start of the current school year to adopt on the graduates of preparatory education this summer.

Further guidance is also needed to enable advancement of training of the Board of Trustees to ***promote the STEM school within the surrounding community through BOTs (Activity 1.2)***. The expected opening of the new schools this September will be an excellent opportunity for the establishment of BOTs and working with them to provide support to the schools. A BOT has been organized at the October school last October and is functioning well and another was established in the Maadi school but is having problems among its members. ECASE plans to work with the newly established October BOT and the school principal during the coming quarter to engage the former with the school operations and its objectives. It will also attempt to facilitate the coming session of the Maadi BOT to understand the problems among its members before attempting to work with them.

To ***promote the STEM school within the surrounding community through Fab Labs (Activity 1.2)***, ECASE has provided ongoing training and transfer to the Fab Lab Managers at both schools, and has initiated conversations with the MoE Technology Development Center (TDC). Fab Labs are operational in both Ma'adi and 6th of October, and both have Fab Lab Managers assigned to them. Each lab/school receives support from Fab Lab Egypt in Cairo and continues to participate in bi-weekly meetings with the ECASE support team.

To enable ongoing support and implementation of Fab Labs, The project assembled a Fab Lab Training Plan that was approved and implemented this quarter at both Ma'adi and 6th of October. The approach focused on two assurances; (1) every student has access to Fab Lab training, and (2) foundational training is delivered by adults. The student training was divided into three tiers from basic to advanced, labeled Tier 1, Tier 2, and Tier 3. Tier 1 focuses on basic tool use and Fab Lab philosophy; Tier 2 begins to integrate the use of the tools into a project; and Tier 3 is a holistic use of the Fab Lab facilities for a project. Student training is led by the Fab Managers at each school with the assistance of Fab Lab Egypt staff. There is one Tiered Fab Lab Training Manual for all three tiers of Fab Lab training.

Fab Lab Managers began training and then were joined by a Fab Guru (Fab Lab expert in tools, use and training) for one week to check on progress and provide help with training. The Ma'adi Fab Lab Manager has trained most of the school to the Tier 1 training level and expects to have finished all training by the end of the first semester of 2014-2015. 6th of October expects to complete Tier 1 training during the second semester of 2014-2015.

During early December, eight members of the Ministry of Education Technology Development Center (TDC) participated in Tier 1 Fab Lab training over three days at 6th of October. This training was delivered by the visiting Fab Guru (Fab Lab expert from Spain). Prior knowledge of CAD tools by these TDC participants made this training easier, faster and deeper. The TDC participants are ready to participate in Tier 2 training as soon as possible.

Looking forward to next quarter, Fab Lab student training continues into the Tier 2 level. Ministry TDC participants will receive Tier 2 and Tier 3 training and be prepared to contribute to additional Fab Lab application at the schools, and school Fab Lab Managers will receive

additional training to support their delivery of student training for Tiers 1 and 2. Finally, the project will provide a plan to procure, install, manage and train for new Fab Labs in the schools anticipated to open in the 2015-2016 school year. Procurement activities will be coordinated with all project partners for the new schools. The design specifics for each school will be part of the Design Studio process expected to begin for the new schools, pending approval in the next quarter.

During this quarter, ECASE project continue ***to provide the English Language Program (ELP) for both schools (Activity 1.3)***. Grade 10 students in both schools; Ma'adi and October, were enrolled in two weeks of intensive classes prior to the start of the academic year. Starting the beginning of the academic year, The non-intensive program ran for eleven weeks; two sessions a week; Sundays and Tuesdays, each for two hours. Two English levels were offered in the non-intensive ELP: Level 1 (Basic level) and Level 2 (Pre-intermediate Level). As In Ma'adi school, there were 7 Level 1 (Basic Level) classes and one Level 2 (Pre-Intermediate level) sections, serving 116 students. In October school, there were eight Level 1 (Basic level) classes and one Level 2 (Pre-Intermediate level), serving 139 students. The ELP provided Extended Reading as part of the evening English class activities for grade 10 students to enhance the students' reading skills and pace. Courses also provided direct instruction of STEM vocabulary that students need in their core subjects.

However, for grade 11, a total of 222 Grade 11 students in Ma'adi and October STEM schools are continuing students, who were enrolled in Pre-Intermediate and intermediate levels in the ECASE English language classes in the second semester, 2013-2014. In Al Ma'adi School, 95 students were enrolled in seven sections of conversation classes ran in Ma'adi school; while in October school 127 students were enrolled in eight sections of conversation classes. The duration of this semester was 11 weeks; Sep. 28th 2014 to Dec. 17th 2014. The classes were delivered twice a week; 2 hours per session, 4 hours per week. Further details about these two activities will be provided in ELP report (**Annex I**)

Finally, the ECASE supported creation of elements toward a Technology Curriculum Plan, with elements drafted, and ***supporting the use of PARLO Tracker and free e-portfolio resources for students to demonstrate proficiency in the application of technology learning outcomes/competencies including competencies in Fab Lab (Activity 1.3.8)***. The draft Technology Plan was presented to the MoE STEM Unit at their meeting on October 1, 2014, as the Technology Plan Elements and the Technology Outcome Grids. The Technology Plan describes graduation outcomes that students are expected to work on all three years with increasing complexity and depth. They will achieve these outcomes through work in their regular classes, technology labs, the Fab Lab, Capstone projects, and supplemental curricular activities.

Students will be responsible for recording all their technology work in an electronic portfolio (<https://www.innovationportal.org>). This plan was well received, and the MoE STEM Unit developed a consensus to accept the recommendation to make this program optional for students until the summer of 2016, at which time it will be reviewed and the MoE will decide whether to make this a mandatory requirement for all students, to modify it, or to continue it as optional. The goal of a Technology Curriculum is to have a plan that is robust, achievable,

sustainable, and that places STEM graduates at or among the highest level of graduates internationally. Instructions for use of the E-portfolio will be provided in Q2.

On December 23, there was a meeting with CISCO representatives virtually to identify computer science elements that would be optional for students to pursue through an arrangement with CISCO. During this meeting, it was agreed that the ECASE team would provide students with access to CISCO courses to enable fulfillment of the technology learning outcomes. In January 2015, the project will strive to create a working relationship with the MoE Department of Educational Computing with the goals of having a member of this department on the STEM Unit and enlisting their input and support of the technology outcomes and plan. Pending the results of this meeting, rollout of the CISCO courses and other requirements will be made available to students.

To further the technology plan, ECASE team will work to ensure procurement for robotics kits, electronics and hydraulics courses, and conduct meetings with appropriate specialists to design associated curriculum as currently stipulated by Ministerial decree. All regular, technical and capstone teachers and Fab Lab coordinators, will receive an orientation to the outcomes and the plan, and students will receive the optional plan and guidance in meeting the outcomes.

Technology learning outcomes are not in Tracker, as these are optional outcomes for students and will only be achieved through e-portfolios. This process will be reviewed in the fall of 2016 to determine any additional requirements.

Objective 2: Strengthen the STEM School local initiative through developing an effective model of specialized high schools focusing on science, technology, and mathematics for gifted students

Tailoring the STEM School to the surrounding community through school specialization (Activity 2.1), is most relevant to the pending new schools that are more regionally based. The Ma'adi and 6th of October schools draw students from many governorates, which suggests localization is useful only to create a relationship with the local community. The BOT will aid this process when implemented. In the meantime, Capstones have become a means of localization for the schools. Ma'adi is experimenting with students taking on water challenges in their communities as Capstone projects, and even with service learning projects tied to capstones to have an impact in the community around the school.

As new schools join the network, it is expected that the students will come from the local governorate, and this will provide an opportunity in the design phase to address Egypt's Grand Challenges through local community impact. The curriculum and Capstone Design Challenges will reflect this goal. At Ma'adi and 6th of October, the Capstone Leaders will reflect on the local impact of the Semester 1 Capstone and use this reflection to inform design of the Capstone Challenges for Semester 2 and beyond.

In the next quarter, the project aims to progress on the Design work to support new schools. This design phase will support tailoring and specialization. Asset mapping and school specialization options will be an element of the Design Studio process to begin for the new schools in the pending quarter. Beyond this, new schools will plan to integrate specialization selections into capstone design in the coming school year. Capstone design will be built into the Design Studio process to begin for the new schools in the pending quarter. Finally, ECASE will work with principals and administrators on school mapping activities in the upcoming quarter if these leaders are assigned in a timely fashion and this activity can be prioritized.

To provide essential educational infrastructure to support experiential classroom activities (Activity 2.2), ECASE project continues to support opportunities by leveraging a variety of activities. In the current quarter, the Fab Lab, capstones and labs are all contributing to experiential classroom activities at varying levels. A few teachers have reached out to their school's Fab Lab Manager to use the Fab Lab to support learning and assessment in their classroom. This additional Fab Lab work has only just begun and we expect more activity each semester. Capstones now include an additional level of direct connection to classroom learning outcomes. While there are journal questions that continue to address learning transfer, an additional requirement was added to the student Capstone Portfolio in which the teams identify at least 5 additional learning outcomes from their curriculum (from the PARLO Tracker) and write a paragraph on each, demonstrating their understanding of the learning outcome through their Capstone project. This requirement is seen in the current Capstone Rubric.

Students use the learning outcomes from other subjects to demonstrate they have the ability to integrate and apply what they have learned in their various classes to real problems (Egyptian Grand Challenges). In this way, the Capstones serve as a key integrator of the STEM Model School Curriculum.

Looking forward, the Capstone Leaders will reflect on the addition of learning outcomes to the Capstone Portfolio and use this reflection to inform the design for Semester 2. This feedback also will be used to inform the input to the Capstone elements of the Design Blueprint for the pending STEM schools.

Pending formal start of work to support new STEM schools, the project is prepared to conduct design studio sessions to customize and localize each new STEM school. TIES will lead the design studios for the new schools in the pending quarter as Local STEM Units and stakeholders are identified.

To further support pending new schools, the project will conduct or facilitate the conduct of STEM Model learning tours to existing schools and briefings for prospective new schools' staff. ECASE will lead STEM Model learning tours to new school stakeholders and leaders in the pending quarter. These will include visits to the Ma'adi and 6th of October schools and meetings with staff from these schools, and MoE STEM Unit members.

With regards to ***create sustainable and mutually beneficial PPPs (Activity 2.3)***, The Public Private Partnership team seeks to create sustainable partnerships from the schools

stakeholders. These partnerships should add value to the schools' different aspects: curriculum, extra-curricular, services, finances and logistics.

To illustrate the progress accomplished by the PPP team throughout this quarter, the following gives an overview and expected outcomes based on meetings, discussions and/or visits to potential partners. A special focus was given to ***Securing financial sustainability***. A series of events were attended in order to reach out to more contacts in different industries and fields to expand ECASE's database of financial institution and improve our reach. The events ECASE participated in were as follows:

- 1- Rise Up Event
- 2- INJAZ – MoE initiative (Attended by his excellency the Minister of Education Dr. Mahmoud Aboul Nasr)
- 3- Cairo Innovates
- 4- AUC Employment organizations showcases
- 5- Al Alfi Foundation – education celebration
- 6- Cairo ICT
- 7- French University in Egypt outreach day
- 8- Education and Scientific Research Panel (Presidential education consultants' committee)

These events help ECASE increase STEM schools exposure among different stakeholders aiming to expand our database of potential partners and communicate the schools achievements to open more doors for cooperation.

To ***organize extracurricular Activities feeding STEM program implementation (Activity 2.4)***, Between October 1 and December 31, 2014, the STEM Unit completed its review of the recommended “Supplemental Curricular Activities” programs for the 2015-16 school year using the rubric established for that purpose and outlined in the Supplemental Curricular Activities Manual.

In the next quarter, the supplemental curricular activities subcommittee of the STEM Unit will continue to refine the manual, specifically the process by which programs are vetted and selected and then supervised in the schools. This will ensure that by the target completion date of May 1, 2015, the manual provides a comprehensive guide to supplemental curricular activities management and lays out a framework for their administration that is sustainable in the long-term.

The following figure represents the Extra-curricular activities during this quarter

Extra-Curricular Activities for STEM schools during Oct. & Dec. ,2014					
<i>Ser. #</i>	<i>Date</i>	<i>School</i>	<i>Destination</i>	<i>Grade</i>	<i>No. of students</i>
1	29-Oct-14	Oct. school	Pharaonic Village	1	150
2	22-Oct-14	Maadi school	Cairo House Seminar	2	12
3	22-Oct-14	Maadi school	Water Company in Maadi	2	14
4	22-Oct-14	Maadi school	Wastewater Plant in Fostat	2	20
5	22-Oct-14	Maadi school	National Cancer Institute	1,2	10
6	22-Oct-14	Maadi school	Fab Lab at Mohandsine	3	6
7	29-Oct-14	Oct. school	ACT exam	3	20
8	29-Oct-14	Maadi school	Desert research center	2	42
9	29-Oct-14	Maadi school	Zewil University	2	24
10	29-Oct-14	Maadi school	Nasser Cancer institute	3	8
11	30-Oct-14	Oct. school	ISEF in Om El Batal School	2,3	16
13	11-Oct-14	Maadi school	Cairo Innovates at AUC	2	8
14	3-Nov-14	Maadi school	ISEF in King Fahd in Nasr city	1,2	60
15	4-Nov-14	Maadi school	Desert research center	2	41
16	4-Nov-14	Maadi school	Water research institute	2	32
17	4-Nov-14	Maadi school	Pharaonic Village	1	92
18	4-Nov-14	Maadi school	Faculty of Engineering in Ain Shams Univ.	3,2	34
19	4-Nov-14	Maadi school	El Amal Hospital	3	4
20	5-Nov-14	Oct. school	ISEF in King Fahd in Nasr city	2,3	29
21	8-Nov-14	Maadi school	Microsoft Company in Maadi	3	7
22	18-Nov-14	Oct. school	documentation center in Smart Village	1	140
23	18-Nov-14	Oct. school	Desert research center	2	52
24	19-Nov-14	Maadi school	Desert research center	2	35
25	19-Nov-14	Maadi school	Faculty of Engineering in Ain Shams Univ.	1	40
26	19-Nov-14	Maadi school	national research center	1,2	30
27	19-Nov-14	Maadi school	Building research center	1	30
28	19-Nov-14	Maadi school	GUC	1	6
29	19-Nov-14	Maadi school	Arab Academy	1	4
30	19-Nov-14	Maadi school	Nutrition center	2	6
31	19-Nov-14	Maadi school	Faculty of Fine arts	1	4
32	25-Nov-14	Oct. school	documentation center in Smart Village	1	52
33	25-Nov-14	Oct. school	Agriculture research center	2,3	29
34	13-Dec-14	October school	Intel ISEF in El Agouza School for girls	1,2,3	8
35	16-Dec-14	October school	Agriculture research center	2,3	29
36	16-Dec-14	October school	documentation center in Smart Village	1	48
37	17-Dec-14	Maadi school	ISEF in Faculty of Engineering-Banha Univ.	2	6
38	21-Dec-14	Maadi school	ISEF in October school	1,3	13
39	22-Dec-14	Maadi school	ISEF in October school	1,3	25
40	23-25 Dec-	Maadi school	ISEF in Student Union Building	1,2,3	67

Also, during this quarter the focus was to create a direct link between the partners and the MoE appointed STEM unit members aiming to introduce the partners to the STEM unit members, to give the STEM unit members an opportunity to evaluate the partners and the programs and to create a transparent and fair system to evaluate potential partners. A series of meetings were held in ECASE office to reach the mentioned goals. These meeting were an opportunity to partners to professionally present themselves and their proposed programs to the STEM unit members. The partners list:

- Company Program - INJAZ
- IT Essentials – Cisco Network Academy
- Open Source Coding -Anova
- Mobile Application Coding – EDP and Orchtech
- Microsoft Coding - Microsoft
- Microsoft Girls Program - Microsoft
- TEDx talks – TEDx Cairo

The meetings with the STEM Unit subcommittee will continue to be the primary method for transferring ownership of this work to local authorities. These meetings will continue on an ad hoc basis until the work has been completed. By May 1, 2015, the Supplemental Curricular Activities Manual will be in its final form, enabling the STEM Unit to administer all supplemental curricular programs using the procedures and methodologies outlined therein. In the 2015-16 school year, the STEM Unit will be the primary authority on these activities, running the entire process on its own, including the evaluation of current activities, selection of new activities, and enrollment of students. Next year, ECASE staff will serve in an advisory role only. Therefore, by May 2016, the Unit will have had a full year of experience in administering the programs and be prepared to manage this area of activity for the STEM schools over the long-term.

In addition, ECSAE assists in engaging science researchers within Egypt to support the EiPIC program has continued. Due to persistent efforts, the STEM Unit also signed off on having the EiPIC program delivered for students in the second semester of the 2014-15 school year.

College guidance for local and international college admittance (Activity 2.5), the efforts provided by ECASE last year yielded results; two consecutive college guidance sessions of one and a half hour each were led by Grade 2 students, Amr Sami and Mahmoud Khater to other grade one students and colleagues. The two students have been well prepared to conduct these sessions of college guidance to Grade 1 students in order to give them an overview on the whole process of College Admission and how to apply to colleges. The presentations started with a brief on studying in universities abroad, getting prepared for the admission and its requirements, and setting priorities since early stages to better fit to the universities' requirements and get accepted.



The purpose of the session called for, organized and held by the students, is to explain to the rest of the students the importance of being aware of the

requirements of the universities' admission in order to start to practice the admission tests like SAT, ACT, TOEFL, IELTS, etc... The students got familiar with the admissions dictionary such as; college/ university, major/ minor, deadline, application, tuition, deadline and financial aid.



However, Ma'adi STEM School, The Ministry of Education has requested from the STEM Unit members to provide Information sessions to all the students' grades in order to

answer all their questions and address their concerns if any. Three sessions addressed all grades in Maadi STEM School on Dec 10th by Mr. Lamoum El Touny, General Secondary Education Department & Head of STEM Unit, Dr. Khaled Al Sayed, Researcher at NCEEE & STEM Unit Member, and Dr. Amany Abdel Aziz, Researcher at NCERD & STEM Unit Member. The main objectives of this session was to get the STEM Unit members more involved in the schools, to build a strong communication between the schools and the STEM Unit members, to provide information about the examination system for Grade 3 students in particular and answer all the concerns of students at all grades.

Objective 3: Build the capacity of highly qualified cadre of STEM professionals and provide opportunities for training and sustained, intellectually rigorous professional learning.

Over the previous quarter, ECASE continued to build upon the previously conducted professional development of teachers in both the Ma'adi and 6th of October schools. Activities included:

- Conducting joint classroom observations with principals and follow-up debriefs.
- Facilitating professional development and training of teachers to become Trainers in their schools for pedagogy and curriculum development (via on-site meetings and emails), see Objective 3, Activity 5 for more details.
- Providing ad-hoc training to new teachers during the semester.
- The professional development subcommittee of the STEM Unit began its review of the Professional Development Institute manuals, with an expected date of final publishing in May 2015.

To *adapt teacher and administrator performance standards for a STEM school context (Activity 3.1)*, ECASE project previously submitted teacher selection criteria, which is being utilized by PAT in teacher recruitment. During December PAT announced for new teachers recruitment. During next quarter final selection of teachers which will impact planning for the pending PDI in January.

In addition, ECASE continued training at STEM Unit meetings on use of the Classroom Observation Scale (COS). The most recent meeting occurred on December 24, 2014, and STEM Unit members signed up for specific dates to visit the schools and conduct observations with the principals. Decisions were finalized to utilize the COS. This recommendation was made due to the COS being:

- A product of best-practices in holistic teacher observation and evaluation, including the Danielson model, RATE (Rapid Assessment of Teacher Effectiveness), MET (Measures of Effective Teaching), RTOP (Reformed Teaching Observation Protocol), Arshavsky's STEM Classroom Observation Tool, and elements of found in the work of the Gate's Foundation.
- A model based on proficiency and aligns with the STEM Model curriculum and

PARLO, which stress mastery and growth over static evaluation.

Further discussion of the observation tool is found in the section detailing Activity 3.3.

During the months of October and November 2014, ECASE examined the effectiveness of professional development and the overall state of teaching to ***build teacher capacity to effectively implement STEM curriculum in the classroom through Best Practices in STEM Pedagogy (Activity 3.2a)***. Data, both qualitative and quantitative, gathered during this time is being used to prepare relevant and substantial training to be presented during the mid-year break for new and veteran teachers. Time was also spent with teachers who are training to become Master Trainers (see Activity 3.5) and ensuring their capacity for implementing best practices.

Materials for the formal trainings, such as the Summer and Mid-Year Professional Development Institutes, as well as year-round professional development, continue to be iterated and uploaded. The primary methods for transfer will be the sharing of these documents with the STEM Unit (through the subcommittee) and through the eventual dissemination to PAT for the accreditation/certification process. The expected date for the dissemination of final documents is May 1, 2015. In the upcoming quarter, several formatting changes will be made to these manuals in an effort to make them most useful and transferable to those currently training to be professional development trainers, the STEM Unit, members of PAT and whomever else will be delivering professional development in the future for Egypt STEM schools.

The manuals are being reformatted to focus on the content (professional development modules that can be used throughout the year) and to the teachers receiving the training, rather than a specific time of year. Therefore, these documents will be referred to as follows:

- Professional Development Institute: Beginning Teacher Level
- Professional Development Institute: New Teacher Level
- Professional Development Institute: Experienced Teacher Level
- Professional Development Institute: Advanced Teacher Level

In the upcoming quarter, time will be spent with teachers in classrooms, pending approval, and virtually, providing differentiated strategies to both new and experienced teachers. During the Mid-Year PDI in January and February, new and experienced teachers will also be provided with best practices (especially in the areas of lesson and lab design and implementation). These sessions will be followed up by on-site coaching (virtually or on location) or by those teachers who are training to become Master Trainers.

During this semester, some teachers who have been with the schools from the beginning have taken ownership of their teaching practices and not only embraced the STEM pedagogy, but also mentored new teachers on an individual basis. This is a tremendous step for the STEM teachers and schools and must be fostered and acknowledged.

Transfer of knowledge for building teacher capacity will happen in many arenas:

- Principals: As the lead educator in their school, principals must be able to recognize good teaching and support those elements which build capacity in their teachers to effectively learn and use best practices. Professional development for principals (tentatively

scheduled for the Mid-Year PDI) will include how to effectively observe and support teachers and effective scheduling for effective teacher planning.

- STEM Unit: The Unit will continue to be engaged in curricular work as well as in the professional development of teachers.
- Master Trainers: The six teachers who are currently training to become deliverers of professional development will continue to receive training on how best to deliver training and will practice delivering training during the Mid-Year PDI and continue to work with new teachers, building relationships and teaching capacity throughout the rest of the year.

To ***build teacher capacity to effectively implement STEM curriculum in the classroom through creating formative classroom assessments (Activity 3.2b)***, ECASE project supported the administration of mid-terms and end-of-semester exams. These tests were successfully developed and administered by the MOE as proposed in the Assessment Committee's *Capacity Transfer Plan*. More detail on the support provided for the development of these exams and related professional development is covered under Activity 4.2

With respect to PARLO Tracker, 2014 Fall Semester data was loaded into the system as it became available from the schools. During the first two months of the semester, schedules were in flux as teacher assignments and student rosters were organized properly. Continued support via Go-To-Meeting and email was given to all entities utilizing the software.

One-on-one sessions were held with both principals to answer questions about the tracker system and to set up the attendance module. These sessions were Q&A as both principals reviewed the School Administrator User Guide on their own and had limited time to be versed on the system. A joint PARLO Philosophy and Tracker session for new teachers was set up for Ma'adi, but time did not permit for the Tracker portion to be covered. Additional assistance was provided in resetting passwords, setting up accounts, and clarifying system functionality. These were not formal training sessions and were Q&A type support.

During this quarter, there was continuous work to ***assess progress through classroom observations (Activity 3.3)***. The work conducted in October 2014 was very much "school-based", as there was a representative in the schools during the month of October visiting schools and observing teachers and principals. There was also another representative in the schools the last week of November, specifically training new teachers and conducting joint observations with principals at both Cairo schools. See Objective 3, Activity 4 for training specifics. In November and December, this work was supported through email check-ins with principals, as well as a continued effort to prepare Unit members to support the observation and evaluation process.

In the month of December principals continued to provide feedback and communication was maintained with school leadership experts through email. There was also a virtual meeting conducted during the December 24, 2014 STEM meeting to explicitly discuss the observation

process with Unit members (discussed above) and to hear reports from the principals regarding their use of the observation instrument.

During the next quarter, STEM Unit members will conduct joint observations with principals and the piloting of a singular observation tool – the COS - will provide a basis for expanding the oversight by the STEM Unit. Also in the next quarter, pending approval, extensive time will be spent coaching principals and assisting them in the observation process, both to build their capacity and to better understand the progress of their teachers.

In October and November 2014, ECASE provided mentoring, in an informal manner, to principals from both Ma'adi and 6th of October Schools to ***provide STEM PD and Curriculum Training for New and Existing Teachers and Administrators including Principals (Activity 3.4)***. No formal training was conducted during this past quarter for administrators.

In the next quarter, it is hoped that a leadership meeting (PDI) can be held for administrators during the Mid-Year Professional Development Institute. This leadership meeting would focus on the sharing of best practices, whole school management, appropriate scheduling for professional learning communities and effective observation practices, with a particular focus on the observation tool and the importance of documented observation and evaluation.

In August 2014, six teachers from the Cairo schools were identified during teaching presentations at the PDI and ***selected to become members of a first Cohort of Master Trainer trainees (Activity 3.5)***. In September and October, weekly ToT meetings were held with the six teachers who were chosen from Ma'adi and 6th of October schools. These first meetings, 90 minutes in length, led the teachers through the basics of conducting professional development for adult learners. They were exposed to the New Teacher PDI documents and began to adapt some of the materials for presentations in their schools. In response to the large number of new teachers hired after the start of the school year, the Cohort members prepared small-scale presentations to meet the needs (as documented by school principals) of new teachers.

In the next quarter, the Master Trainers will take the experiences from the first semester and add the additional component of assisting with workshops and training for new teacher candidates for the STEM schools during the Mid-Year PDI. Their capacity for engaging the audience and accurately modeling best practices will be assessed and will inform the rest of the training that will take place during the second semester, culminating with the Cohort assisting with the presentation of the Summer PDI.

All transfer will be via the STEM Unit subcommittee on professional development and ultimately to PAT, who will certify the training process and accredit Master Trainers. The materials and process for the accreditation have been translated to English, and the expected date for training materials to be sent for submission is May 1, 2015.

To ***create a virtual STEM Professional Development Learning Platform (Activity 3.6)***, the ECASE team has been utilizing Google Drive for content management, including finalization and development of the STEM Model with specialized manuals, handbooks, and the ultimate Design Blueprint, a compendium of all content for replication, including curriculum, capstones,

tools, and process. As the various elements and manuals are created, they are stored within this environment, and utilized for ongoing training sessions in the field. The status of each manual for training and its associated subcomponents is being maintained in a master list. This list includes the content elements, responsible parties, status, and final completion dates for all manuals from the ECASE partner organizations. Most manuals have been discussed with the STEM Unit and various subcommittees are reviewing content.

As mentioned in the Project Management section, the Google Drive and content may need to be transitioned to OneDrive, and will need to be discussed with USAID, the MoE STEM Unit, and TDC. During this past quarter, the team continues to update the Google Drive and the corresponding Portal interface, including:

- Explored two new development frameworks (Bootstrap and Polymer) for improved UI and mobile compatibility. Note: examples below are early access betas and are subject to change.
 - live test demo of Bootstrap with Material Design theme
 - live test demo of Polymer using core-animated-pages with cards
 - live test demo of Polymer using core-scaffold
- These items need to be discussed with TDC and others with the potential transition to OneDrive.
- Added Blueprint page with corresponding folders organized on Google Drive, front-end summary report, and backend spreadsheet with validation.
- Added student page with subsections per grade. Each year/grade page includes a calendar of all courses and units for the year (as planned in curriculum), information on capstones including FAQ and rubric links, and links to Tracker login.
- Created Lesson Plan Monitoring Sheet for automatic lesson plan updates. Used to generate a report of current lesson plans stored in Google Drive.
- Held meetings with TDC personnel to increase collaboration and technical knowledge transfer.

In the next quarter, pending further discussion on transitions to OneDrive, the following activities were planned:

- Include link to video tutorials as library of tutorial videos increases.
- Build 'Teacher' section of the site and prepare for rollout to teacher user group.
- Polish site front end, simplify menus and hierarchy and increase optimization for mobile devices.
- Train multiple content authors to produce blog content for the site.
- Continue to develop more advanced curriculum export tool which will produce

customized documents from the curriculum to generate materials for different user groups (i.e. an export for students that only includes learning outcomes or selected courses). Also work to develop dynamic pages which reference material from the curriculum using Google Drive as an accessible CMS (content management system).

Finally, the Design Blueprint is considered the guiding document for the planning and implementation of the new schools as well as the sustainability of the current schools. In this quarter, the ECASE staff worked to improve the interface to the Design Blueprint, populate the Design Blueprint, review the Design Blueprint, and train the STEM Unit on the purpose and use of a Design Blueprint. The back end of the Design Blueprint is essentially a large spreadsheet with information and links to resources. During this quarter, the front end or user interface was improved as discussed above, and to provide easy access to important information.

In December 2014, the STEM Unit participated in a one-day training on the Design Blueprint focused on the purpose and framework. This training was activity-based, dividing the STEM Unit into groups to populate select Design Features with Success Indicators and Success Indicators with Action Items. At the end of this exercise, the STEM Unit embraced the purpose of the Design Blueprint, understood the various components and was prepared to begin to contribute to populating the Design Blueprint in preparation for the first Local STEM Unit which will use it to open the next Egypt Model STEM School.

In the next quarter, the ECASE staff will finish populating the Design Blueprint in collaboration with the STEM Unit. The Local STEM Unit(s) to be identified will receive training on the purpose and application of the Design Blueprint in conjunction with the Design Studios that should take place in the upcoming quarter.

Objective 4: Strengthen MOE capacity at the systems and policy level to sustain and replicate these model schools

To enable *STEM curriculum training and coaching (Activity 4.1a)*, the project continued to provide ongoing support to documentation of the curriculum. During this quarter a subject matter expert was present in the field. A focused attention to documentation of the entire curriculum and the development process was delivered via a Curriculum Design Manual. The manual has been undergoing review throughout the project, but this quarter, a particular focus was placed on development of the following topics:

- Curriculum Training Focus on Laboratory Equipment and Procedures
- Curriculum Implementation V. 2.0 including:
 - o New Teacher Training,
 - o PARLO Workshops,
 - o Laboratory Handbooks,

- o Textbook Review, Procurement and Inventory
- o Monitoring Implementation of Curriculum
- Alignment and Administration of Assessments with Learning Outcomes (including Practical Examinations)
- Create opportunities for contextualization within curriculum
- Align all Materials, Equipment, Facilities and Safety Procedures with Curriculum (including Laboratory and School Safety, Technology Plan, Linking Inventory to Curriculum Develop Curriculum Review Process for the Assessment of Curriculum, Implementation and Student Achievement

To monitor the implementation of the curriculum, at the suggestion of a representative of NCEEE, the technical team has also created an automatic online form for teachers to use to chart their weekly progress toward achievement of learning outcomes. Currently teachers are reporting on an ad hoc basis to their principals. As this new system has not yet been adopted, ECASE team hope to have this fully operational by the beginning of second semester. Such a system for weekly reporting of progress on learning outcomes will enable even more close alignment of examinations with curriculum implementation.

The Training Manual for Laboratory Equipment - February 2015 was prepared this quarter and describes training to take place in February that will review first semester and prepare teachers for second semester. Significant work has been done with the inventory and procurement staff to develop a Master Inventory that links every item to one or more activities and learning outcomes. The STEM School Laboratory Coordinator is working to develop the protocols for working with teachers to make these linkages and conduct complete laboratory inventories. Under this supervision, he presented a workshop for the MoE STEM Unit on the Preparation of Practical exam. This was followed by a presentation exam. This work culminated in collaboration with NCEEE on the preparation of a Practical Exam Student Guide. In support of activities geared toward contextualization of the curriculum, this quarter the project developed a model Egyptian chemistry case study to specifically tie one of the learning outcomes in chemistry to an Egyptian problem and potential solution for one of the Egyptian Grand Challenges. A plan was created (as seen in the Curriculum Development Manual) for the development of other case studies.

Equipment training will take place in February. ECASE will support MoE STEM Unit members in the implementation of their own recommendations for the design and administration of practical during the second semester. The project also will oversee the completion of the inventory work during the second quarter of this contract year. In February, two workshops will be conducted on writing contextualized case studies: **Agenda for MoE Case Study Workshop** with a follow-up on Feb. 25. The Curriculum Development Manual Sections cited above describe detailed plans to move forward on all other aspects of curriculum implementation including design and implementation of the **School Laboratory and Safety Plan**, continuing

work on the Technology Curriculum, and collecting and analyzing data for the Curriculum Review.

During December, the project worked with MOE STEM to lay the groundwork for curriculum review. During these meetings, the team created a designated task force to prepare instruments for survey and interviews (and associated questions) in support of the designed curriculum review.

With respect to **capstone curriculum implementation and training for all grades (Activity 4.1b)**, ECASE supported capstone design for Semester 1, capstone leader and teacher training, rubric creation, and journal question development prior to the beginning of this quarter. Transfer of the Capstones to the schools is proceeding according to plan. The Capstone Leaders that led training and designed the capstones with ECASE staff support took the lead implementing the capstones. Less transfer happened with the STEM Unit, but prior training focused on recruiting STEM Unit members for capstone leadership, and those leaders will run much of the capstone events for semester 1.

Teachers (Capstone Leaders) were responsible for designing the Capstone Design challenges and journal questions prior to the semester, lending to a sustainable approach for both schools. The STEM Unit has participated in additional training sessions this quarter and will take a lead role in evaluation and organization of the Capstone assessment events at the beginning of next quarter.

The project focused attention during Semester 1 to include some improvements for Capstones. Capstones implemented this quarter are scaffold for each grade, with Grade 10 participating in a very prescribed Capstone Challenge, Grade 11 having an assigned Capstone Challenge but given latitude to select a problem, and Grade 12 given freedom to select any topic that can be connected to a curriculum theme of communication.

Transfer will receive a big boost at the conclusion of the semester next quarter as school and STEM Unit personnel take responsibility for managing exhibitions and participating as evaluators. The ECASE team together with the STEM Unit will hold a review (design review style) to examine the Capstones and make recommendations for next semester. The new Capstone Challenges and processes will be designed just prior to the beginning of the next quarter.

In the current semester, Capstone exhibitions will take place at each school to reduce costs and to bring external evaluators to the school to raise awareness among these post-secondary participants. The poster and prototype will be evaluated at the same time by the same evaluators rather than separately as in past exhibitions. Teachers from each school will evaluate the Capstone Portfolio (the written record of the Capstone) separate from the exhibitions to permit more time for evaluation and to continue to engage the teachers in the Capstone evaluation process.

Capstone events occur at the beginning of next quarter. The STEM Unit and the ECASE team will analyze these events and determine if changes are necessary for Ma'adi and 6th of

October, and what form of the Capstones should be prepared for the new schools who have never conducted a Capstone.

Several changes in the first semester of 2014-2015 were made to improve sustainability. A prescriptive approach for Grade 1 narrowed the scope of their capstones and created the opportunity to share from a pool of materials, reducing the overall cost of Grade 1 materials. Student team sizes were increased on average to reduce the number of teams and therefore overall costs. Capstone events are to be held at the schools to remove the cost of renting and preparing an external facility. Evaluation of posters and prototypes are to be combined, in part, to reduce the number of evaluator-hours required to assess all of the projects. Fewer university evaluators and more STEM Unit evaluators for this semester will also reduce total cost. All of these changes will be examined after the events early next quarter to determine whether they were effective at improving sustainability and should be continued in the future.

In addition, the increased use of Curriculum 2.0 Learning Outcomes in the Capstone projects will be evaluated to determine efficacy and opportunity for improvement in the next semester.

External evaluator training was conducted by the STEM Unit with the support of ECASE staff in an effort to accelerate transfer and improve sustainability. Since Capstone Portfolio evaluation changed for this semester, the STEM Unit participated and observed the teacher training sessions led by ECASE staff. Next quarter, moving into the next semester, the plan is for the STEM Unit to run this training as well.

While formal Fab Lab training did not begin until late in this quarter, students continued to receive the training they needed to use the Fab Lab capabilities to support their Capstone projects. This was particularly true for Grades 2 and 3 in which the students have more experience with Fab Lab. Early next quarter at the Semester 1 Capstone events we will see the full impact of Fab Lab in the student work.

Formal student training for Fab Lab began this semester with a structure Tier 1 program in both schools. Tier 1 training will continue in semester 2, and once all students have received this level of training, the formal training will progress to Tier 2 and Tier 3.

Next quarter during PDI, Fab Lab will be stressed as an asset for providing evidence of learning outcomes in any number of subjects. Use of labs for practical exam was discussed previously in this section.

ECASE also worked to ***develop Assessment Instruments for student course work aligned to STEM Curriculum (Activity 4.2)***. These various activities are described in detail below.

Refining the Assessments

All tests have been refined and improved based on careful expert review, analyses of the assessment data, and work to make sure that they are closely aligned to any changes in the curriculum. The Capacity Transfer Plan, developed by the assessment committee, lays out

responsibility for actual lead development, although the Committee retains a very active role in providing guidance, oversight, and review of all work. The Tests of Concepts remain under the control of the Assessment Committee for development.

Test of Concepts (TOC) will be administered to Grade 3 students at the conclusion of the academic year in June 2015. TOCs will be administered in the following STEM courses: pure math, applied math, biology, chemistry, geology and physics. These Tests of Concepts will once again be a part of the Grade 3 matrix for student acceptance to the universities. A decision was made by the MoE to also include a year-end assessment aligned to the Grade 3 learning objectives for each STEM course. This learning objective aligned summative assessment will also comprise a designated percent of the Grade 3 matrix. This year, the project assessment committee will be responsible for developing the TOCs while the MoE content experts will be responsible for developing the learning objective aligned summative assessments.

Members of the assessment committee continued their work during the first quarter of the third year of the project on the development of items for each of the five Test of Concepts exams. While some of the test items from last year's TOCs will be included in this year's assessments for equating purposes, the majority of test items will be replaced for security reasons. Work on the development of items will continue into the second quarter of year 3 of the project. The MoE and ECASE leadership has made a decision not to administer pilot the TOC exams using high schools in Egypt as was done in the last academic year. No decision has yet been made as to whether to pilot the reconstituted TOCs using United States STEM school students. New TOC exams in the five STEM content areas should be completed and ready for administration sometime during the end of the second quarter. Once administered to the Grade 3 students, the Test of Concepts will provide the MoE a metric for comparing the performance of this year's graduating class to last year's graduating class.

Training on Formative Assessments

ECASE staff have continued their focus on formative assessment by conducting a remote session on the philosophy of PARLO and formative assessment for ECASE teachers on November 26, 2015. This Formative Assessment Presentation was requested by the principal at Ma'adi in order to assure that all teachers had appropriate PARLO training. It included all new teachers at Ma'adi who had not had the August training, 2 mentor teachers who had engaged in the August presentation and were using PARLO and willing to serve as mentor teachers, and a facilitator who helped with translation. The outcomes of the workshop were as follows. Participants will be able to address the following:

1. Explain the difference between high performance and proficient and not yet proficient performance on a learning outcome.
2. Answer - Why should we provide reassessments?
3. Develop an argument for the use of PARLO vs a more traditional way of teaching and assessing students.

In order to meet these points, the presenters focused on the definition of PARLO, followed by a discussion of PARLO as a learning system and the characteristics of high value learning outcomes. This was followed by an examination of PARLO as an assessment system, the nature of evidence and how to assign ratings to evidence and to learning outcomes. Webb's depth of knowledge and cognitive demand was discussed. In addition, learning as a progression became a focus when the issue of reassessment of student's proficiency was examined.

Midterm, Final and Practical Exams

A meeting with the MoE was held on October 15, 2014 to reach consensus regarding establishing a framework for the midterm exams. The assessment committee content experts reviewed the midterm exams after their administration. This review included an analysis of the alignment to Learning Objectives (LO), an analysis of the designated item level Depth of Knowledge, and a PARLO rating for each student on each LO on each test. An effort was put forth to get these PARLO ratings to the students however this was unsuccessful. Each of the assessment committee content teams held virtual discussions with the Egyptian content test developers regarding the midterm exams.

Much of the work of the Assessment committee during the first quarter of year 3 focused on the development, administration, scoring, and feedback sessions for the midterm examinations for Grade 1 and 2 students. Midterms exams were developed by the MoE content assessment experts and submitted to the assessment committee for relevant feedback. At the beginning of this process, assessment committee members helped the MoE establish a framework for the midterm exams. Once these STEM course midterms were developed and administered to the students of both schools, the exams were submitted to the ECASE Assessment Committee for review and feedback. Included in the midterm exam package were the actual exams, item alignment to the course Learning Objectives (LO), analysis of each item for cognitive load, and the answer key. Assessment committee members from the appropriate content area reviewed this material and provided comment on the item alignment to course LOs, item cognitive demand and the designated answer.



After the administration of the midterms, the assessment committee's statistical experts graded and analyzed the exams. Summary spreadsheets were produced with exam results. In a separate process, the statistical experts produced a PARLO rating for each of the LOs on each test in math and science. The summary spreadsheets and PARLO ratings for each midterm exam were then shared with the MoE assessment members.

A series of feedback meetings was then conducted for each of the content areas: biology, chemistry, physics, geology, mechanics and math. These feedback sessions took place between the ECASE content assessment experts and the MoE developers of the midterm exams. During

these sessions, the ECASE assessment experts provided feedback on the exams as formative assessments. Item learning outcome coverage and cognitive load designations were reviewed. An emphasis was placed on how to develop items that stressed higher levels of cognition. MoE members commented during the feedback sessions and in subsequent meetings that they found these sessions extremely helpful.

Practical exams in STEM courses were also developed by the MoE with input from the ECASE school teachers. The project provided consultation for these exams in terms of their development, conceptual framework and materials required in order to administrate the exams. Year 1 and 2 exams were administered to the students in November while the Year 3 exams will be administered to the students in the beginning of January 2015.

Test of Concepts Training

Specific TOC training was not completed. This part of the Transfer Plan has been postponed until next year, fall 2015 as it was determined that the ECASE should retain control of its development. Rather, responsibility for development of mid-terms and end-of-semester exams was transferred to the MoE with the Committee providing guidance, training, support, and review. Training and support therefore has focused on these semester curriculum-based exams.

Learning Outcome Training

Detail on this training is described in detail in the section on mid-terms, where feedback and MOE sessions related to the development and improvement of semester exams is covered, which at their core focus on helping the MoE members to better understand LOs and how they can be integrated into assessments.

University Readiness Test

ECASE advertised in December an invitation to Express Interest in developing a University Readiness Test for the STEM schools. Before the end of the month four entities expressed interest in participating in the bid and an RFP was issued to submit bids by the interested parties. ECASE expects to receive bids in January so that a decision is made to bring somebody on board by the time the second semester starts. The objective is to build on the previous USAID funded effort to develop the CAPS (Critical Thinking, Achievement and Problem Solving) test, which is standardized and used up to grade 10 students in Egyptian public schools. The development of the URT for STEM Schools will build on the CAPS, adapt and expand it for use by students at the Grade 12 level. The MOE officials are already well-versed in the design and implementation of the CAPS test and bidders are expected to further develop capacity of identified MOE members to acquire the skills to develop and maintain the URT. The RFP included three interdependent tasks: the development of a URT, the establishment of an item bank resource within the Ministry and the capacity upgrading of MOE personnel responsible for designing STEM exit exams.

Professional Development and Meetings

ECASE partners continued to meet virtually with the MoE STEM unit and assessment developers. Topics for training included how to use assessment data with teachers and students

and corrective action strategies. The co-chairs also participated in meetings with MoE and ECASE leadership on assessment policy matters. In October 2014, assessment committee members met virtually with the MoE STEM Unit and focused on helping guide the creation of the midterms as formative assessments. At the end of October 2014, the assessment committee members participated in the ECASE three-day leadership meeting in Philadelphia where assessment policy issues were reviewed and evaluated. Some of the most critical outcomes of the leadership meeting included the sustaining of the current Year 3 matrix and clarification of the status of the TOC and URT exams. There was also the determination that learning objectives weren't being sufficiently tested in Grade 3 courses and therefore a need existed for the development of Year 3 summative content exams aligned to the learning objectives.

The assessment committee leadership met with the MoE STEM Unit in December 2014 to discuss the grading and analysis of the midterm exam results and establish a series of feedback meetings with the midterm test developers that has been described in the previous section. ECASE partners also developed and presented a white paper on the importance of formative assessment and the PARLO scoring system.

In January 2015, the assessment team will once again go to Cairo in order to conduct assessment based professional development and participate in meetings with the MoE STEM unit, assessment development team and ECASE school administrators and teachers. Training topics include the analysis and use of assessment data, test item development, the future role of formative assessments, assessment policy and the role of the TOC and URT as well as other relevant topics. Preparation for these professional development sessions is ongoing. In conjunction with this professional development and all assessment initiatives, the assessment committee is continuing their work on the requisite assessment manuals.

MoE presentation documents included:

- October 15, 2014: Midterm Presentation
- November 26, 2014: Midterm Assessment Feedback
- December 17, 2014: MOE Final Exam Structure and Midterm Results
- Mid-Term White Paper: White Paper Midterms 2014

Objective 5: Support the MOE, establish and build the capacity of the MOE STEM Unit

In efforts to *support the Ministry of Education STEM Unit and its member organizations (Activity 5.1)*, ECASE partners have worked with members of the Ministry of Education STEM Unit on a weekly basis throughout the quarter to enable collaboration and transfer of knowledge to enable the MoE to sustain the work. To better facilitate these meetings and their



agenda/focus, the ECASE team has created an online STEM Unit topics to be discussed and their associated priorities. STEM Unit meetings happen weekly on Wednesdays, but additional task force groups meet outside of these meetings to support review and finalization of STEM School content such as manuals and processes. Topics discussed over the last quarter, include but were not limited to:

- Lab Practical planning
- Curriculum review processes/design
- Midterm scoring/testing feedback
- Capstones and capstone evaluation
- Continued task force meetings on a variety of topics

3. Challenges and Resolutions

The opening of the three new schools in Assiut, Alexandria and Daqahleya was planned for school year 2014/2015 and got postponed because of the Wind-up that ECASE endured between the months of October 2013 and March 2014, where by April it was too late to coordinate for the schools opening in September and adequately plan for their proper operation. Also, although in April 2014, ECASE visited a school in Moharam Beh in Alexandria, and suggested to the Ministry to use the premises as a temporary alternative for a STEM school until the new school is built in Borg El Arab, The Minister objected on opening a new STEM school in an existing building and preferred to open it the following year. ECASE expects the three new schools to open September 2015 in order for them to have enough overlap with ECASE which ends August 2016. This will offer only one school year of support by ECASE to the three new schools. Based on reports presented by GAEB, it appears that Alexandria and Assiut are in a promising position to open in September 2015, while Daqahleya is still behind in construction. The lag in completing the Daqahleya School may not allow it to be completed by September 2015, hence, its opening the following school year will not allow it any support from ECASE.

The continuous change in leadership at the schools is a major impediment to ECASE's leadership capacity building efforts. Since the start of the project in 2012 the current principal is the third one in each of the two schools. This means that a school principal does not last one complete year. In five of the six cases the decision to dismiss the principal was made by the MoE. This puts tremendous pressure on the project to proceed with a new leadership at each school each year, invest in upgrading their capacity and then see them leave the school. School leaders are the single most important element in the proper management of the schools, their loss is always detrimental to the project efforts and the continuity of its professional development activities.

Since the start of this quarter and almost until its end teachers, principals, administrators and other employees at both schools were not paid their monthly salaries for over three months in a

row. The Ministry was not able to pay them because the subcontractor responsible for their monthly salaries have already signed a contract with the Ministry but abstained from paying any remuneration to the schools' staff because of some internal disputes. This had a very negative impact on teachers who tolerated the situation at the start, but towards the end had to meet with the most senior officials at the Ministry demanding to be paid and threatened to cease providing services at the schools. This had a very negative impact on the teachers' performance and their ability to attend training, properly teach in classes and follow up their other teaching duties. While tis same problem appeared also last year at the start of the school year, this year was for a much longer period. ECASE anticipates that this problem may be resolved for good after the Education Support Fund is now taking charge at the schools.

Annex A: ELP Report

ECASE ENGLISH LANGAUGE PROGRAM

Quarterly Report, FY 2014-2015, 1st Quarter, September – December 2014

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1. First Academic Semester Background

I. Grade 10

Grade 10 students in both schools; Ma'ady and October, were enrolled in two weeks of intensive classes prior to the start of the academic year. A description and details of the intensive program were introduced earlier in July-September 2014 Quarterly Report. Ma'ady school English classes served a 116 students; divided into five Level 1 (Basic level) sections. October school English classes served 139 students; divided into seven Level 1 (Basic Level) sections.

The non-intensive program ran for eleven weeks; two sessions a week; Sundays and Tuesdays, each for two hours. Two English levels were offered in the non-intensive ELP: Level 1 (Basic level) and Level 2 (Pre-intermediate Level). As In Ma'ady school, there were 7 Level 1 (Basic Level) classes and one Level 2 (Pre-Intermediate level) sections, serving 116 students. In October school, there were eight Level 1 (Basic level) classes and one Level 2 (Pre-Intermediate level), serving 139 students.

The ELP provided Extended Reading as part of the evening English class activities to enhance the students' reading skills and pace. Courses also provided direct instruction of STEM vocabulary that students need in their their core subjects. Further details about these two activities will be provided below.

II. Grade 11

A total of 222 Grade 11 students in Ma'ady and October STEM schools are continuing students, who were enrolled in Pre-Intermediate and intermediate levels in the ECASE English language classes in the second semester, 2013-2014. In Al Ma'ady School, 95 students were enrolled in seven sections of conversation classes ran in Ma'ady school; while in October school 127 students were enrolled in eight sections of conversation classes. The duration of this semester was 11 weeks; Sep. 28th 2014 to Dec. 17th 2014. The classes were delivered twice a week; 2 hours per session, 4 hours per week.

2. Instructors Staffing

Due to the program expansion and the significant increase in the number of classes as well as the new work commitments of some of the experienced ELP teachers, there was an urgent need to enlarge the ELP pool of teachers. Seven new teachers were hired, following the regular hiring process explained in the previous reports; announcing vacancies, screening teachers' resumes, running the demos, finalizing the selection, and conducting the program orientation. The newly hired teachers joined the existing cohort of 11 experienced ELP teachers.

The newly hired teachers are:

- a. Mr. Rami Nessim
- b. Ms. Dalia Helmy
- c. Mr. Ahmed Samir

- d. Ms. Esraa Khaled
- e. Ms. Amira Mahmoud
- f. Ms. Noha Hanafy
- g. Ms. Hanaa Abd El Ghany

The seven new teachers have previous rich and distinguished teaching experiences in schools, institutes, and universities.

I. Grade 10 New Teachers

Teachers' Bios:

a. Mr. Ahmed Samir

Ahmed is a graduate of Faculty of Languages & Translation, Simultaneous Interpretation Department. He is a Teaching Assistant at the same faculty. For the time being, he is pursuing his MA in linguistics. He has a 4-year experience of English Teaching. He got the PCELT course from SIT World Learning Institute in cooperation with AMIDEAST. He worked as a senior trainer at Bright Minds Centre. He worked as a translator for the American Army during Bright Star Maneuver.

b. Ms. Esraa Khaled

Esraa Khaled Awad teaches English at an American School in Cairo. During the academic year 2012/2013, she has been a Fulbright scholar at Florida Memorial University in the United States of America where she taught Arabic as a second language and studied three graduate courses related to education: Teaching English for Middle and High school, Special Education and Educational Research. Her research focused on learning styles and differentiated instructions. Esraa had worked for Berlitz Language Center for three years besides working for a language school for the same period. She graduated from the faculty of Al-Alsun (languages) in June 2009.

c. Ms. Hanaa Abdel Ghany

Hanaa Abdel-Ghany graduated from the Faculty of Arts, English Language and Literature Department, Cairo University in 2009. She was awarded the English Department award for Linguistics due to her excellence in that field during her four years of study. Hanaa has been teaching English as a Second Language (ESL) since 2010. She worked at Berlitz where she taught conversation and Business English and conducted placement tests- in the company's centers and corporate projects. She also worked as an English Language Demonstrator at El-Ahram Canadian University teaching EAP and ESP courses. She also taught pre-academic English and general English courses at the corporate division of Amideast Egypt. In addition, she joined the Grants Division at the American University in Cairo (AUC) as a soft skills and English language trainer. In August 2014, she started working at Misr Business Academy (MBA) holding the responsibility of designing and delivering the general English courses to the company's corporate clients. She

also worked as a volunteer teacher at Saint Andrew's Refugee Center in the English Adult Program. She got her Fundamentals of English Language Teaching (FELT) certificate from the AUC. She is interested in communicative teaching and curriculum designing and she has created her ESL Facebook community named "Brainy Teacher".

d. Ms. Amira Mahmoud

Amira graduated from Faculty of Arts, English Department- Cairo University in 1999. She has been working as a teacher since graduation. The places she worked at as an English instructor include the English program at Sadat Academy for Management and Sciences, Radio and TV institute. She works also at the School of Continuing Education (SCE), The American University in Cairo (AUC) as an instructor of translation. Now she holds the position of the head of translation department at Eastern Company.

She got a professional certificate, SCE, AUC in written Media and Legal translation. She also got a diploma in Applied Linguistics, Cairo University. Amira registered for my MA at Suez Canal University in 2013 and still working on it.

II. Grade 11 New Teachers

Teachers' Bios:

a. Mr. Rami Nessim

Mr. Rami Nessim has graduated from Faculty of Arts English Dept. and got "A-" in his TEFL Certificate from Notting Hill, College, UK. Rami had a work experience in New Horizons Company". Additionally, he worked as a Supervisor at "Harvest British College" and an English lecturer at the British University in Egypt. Currently, Mr. Rami is working as an English Instructor at the Ahram Canadian University in Cairo. Moreover, Mr. Rami has been working as an English Instructor and a Soft Skills Trainer at the Edu Egypt program for 4 years.

b. Ms. Dalia Helmy

Ms. Dalia Helmy had her BA with honors degree in English Language and Simultaneous Interpretation; 4th top of 2010 Class. She is a holder of a Certificate in Written Translation in Translation and Arabic Studies Division, School of Continuing Education, American University in Cairo in 2009. Additionally, Ms. Dalia is a holder of the Professional Certificate in English Language Teaching (PCEL) from World Learning SIT program and AMIDEAST in 2013. As an English instructor, Ms. Dalia worked at the Forum Center for Languages, Al-Ahram Canadian University, and AMIDEAST, Egypt. Ms. Dalia is a freelance subtitler at Iqraa' International TV Channel, and a full-time translator at Al-Azhar Al-Sharif-affiliated Islamic Research Academy. Furthermore, Ms. Dalia is a Social Activist and a Volunteer in Al Forsan Charity Association for raising awareness about the rights and the potentials of People with Disabilities.

3. Curriculum Planning, Implementation, and assessment:

At the beginning of 2014/2015 first semester, a teachers meeting was held to serve as a program orientation session for the new teachers and as the new semester orientation to the current students. The following points were tackled in the Teachers Meeting:

1. ELP Team Contact List
2. Computer and Internet Access Guide
3. Transportation Routes and Schedule for October school team
4. Academic Term Procedures Time Plan
5. Schools Personnel and facilities

I. Grade 10

a. Summer Camp

-Baseline Exam Description

The new cohort of students who joined grade 10 took a Baseline exam. The Baseline exam is divided into two parts: Part one includes the writing and the speaking sections. The length of both is 45 minutes; 40 minutes for writing an argumentative essay and 5 minutes for a speaking assessment. Both the writing and the speaking sections are adapted from the IELTS (General part). The total mark for each is out of 45 and the public version of the rubrics for both the writing and the speaking are used for correction.

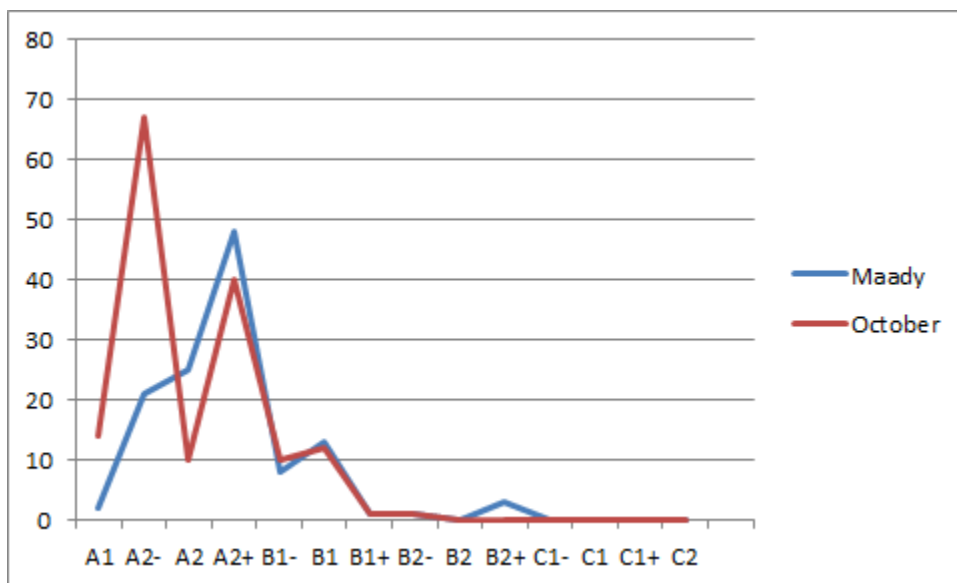
The second part of the Baseline Exam has two parts: listening and reading. Both the listening and the reading sections are adapted from the Cambridge's First Certificate in English (FCE). The time allocated for the listening and reading is 1 hour and 40 minutes. The listening section takes 40 minutes and it has four parts. Students listen twice to each listening conversation. The overall grade of the listening section is 30, where each question has 1 mark. The types of question range from the multiple choice questions to fill in the blanks with the correct word. The one-hour Reading Section has three parts (passages) with 30 questions. The types of question include multiple choices and matching.

-Baseline Exam Results

The total number of new Grade 10 students who participated in the Baseline Exam on the first day of the Summer Intensive Course was 113 at October and 90 at Maady Schools. A make-up baseline exam was conducted for the students who joined the two schools, where 37 at October school sat for the exam and 27 at Maady school. A new version (scaled at the same level to ensure consistent baseline findings) of reading and writing sections of the baseline exam was offered for the students who sat for the make-up test.

The following table (1) is a comparison for the total Baseline exam grades at both Ma'ady and October STEM schools:

Range of Overall Proficiency Rate	Proficiency Level, Number/Percentage of Students Achieving Level	
	Maady	October
0-2.75	A1 (2/2%)	A1 (14/9%)
3.0-3.25	A2-(21/7%)	A2- (67/43%)
3.5-3.75	A2 (25/20%)	A2 (10/6%)
4.0-4.25	A2+ (48/39%)	A2+ (40/26%)
4.5-4.75	B1- (8/7%)	B1- (10/6%)
5.0-5.25	B1 (13/11%)	B1 (12/8%)
5.5-5.75	B1+ (1/1%)	B1+ (1/1%)
6.0-6.25	B2- (1/1%)	B2- (1/1%)
6.5-6.75	B2 (0/0%)	B2 (0/0%)
7.0-7.25	B2+ (3/2%)	B2+ (0/0%)
7.5-7.75	C1- (0/0%)	C1- (0/0%)
8.0-8.25	C1 (0/0%)	C1 (0/0%)
8.5-8.75	C1+ (0/0%)	C1+ (0/0%)
9	C2 (0/0%)	C2 (0/0%)



Graph A- Baseline Grades Comparison at Maady and October STEM Schools

The above table (1) and graph (A) show that over a third of Maady students (39%) scored A2 between (3.5) and A2+ (4.25) as their overall proficiency bands on the Baseline exam. At October school, nearly half of the students scored A2- (3.0). However, similar percentages (19% in Al Maady and 15% in October) of students scored in the B1 proficiency band (4.5-4.75) range in both schools.

This comparison shows that the overall language proficiency of the girls at their entrance level is higher than that of the boys. However, results indicate that the majority of students in both schools enter with a proficiency well below that which is considered necessary to handle STEM content in English. Baseline findings indicate the need to sustain extra-curricular support for students to enhance their English language skills. For more information about the Baseline grades see Appendix A.

-Description of the English Summer Course

Grade 10 students in both Ma'ady and October STEM schools participated in the 10-day intensive summer camp. In Ma'ady School, 95 students joined the Summer Camp, divided into 5 classes. In October School, 129 students joined the Summer Camp, divided into 6 classes. Determined using Baseline exam results, all grade 10 students in both Ma'ady and October STEM schools were placed in the Basic level. Sections were streamed so that students at similar proficiency levels could work together. Teachers differentiated instruction to ensure that students could improve at the appropriate pace. The daily regular classes ran for 6 hours daily, Sunday to Wednesday and for only 3 hours on Thursday. Thursdays were dedicated to tests and presentations.

Daily classes addressed the four English skills, Reading, Listening, Speaking, and Writing. Courses also addressed grammar and vocabulary. Each day, students had four 1h 15m sessions, with a 15-minute break between each session.

In addition to the English classes, the ELP provided Extended Reading- Graded Readers/ Starter Level and Level 1 daily sessions to enhance the students' reading skills and pace, and to provide enough comprehensible language input to improve all other skill areas. The Extended reading classes were scheduled to meet daily, for 60 minutes during the last session each day, except for Thursday. Students in both schools were able to finish the Starter Level during the first week, so they started to read the Level 1 of the Graded Readers in week two.

Compiled materials from different resources were used for the Summer Intensive Course. The compiled resources were adapted from different professional English language National Geography Learning Series books: Pathways 2: Listening, Speaking and Critical Thinking, World English 1 and 2. Other academic resources were used like: Effective Reading 2, Read and Reflect 1, Reading Explorer 2 and Grammar in Context. Other challenging online resources were adapted and used for teaching grammar and writing interactively. Different themes were covered during the Summer Course, including: human and animal communication, privacy, technology and internet, science and technology for communication, preventing diseases and staying healthy, health and body, exercise routine and stay healthy and forbidden food and bod care. The reason behind choosing these simple topics and themes was that they would help the new cohort of students to be acquainted with the themes that are related to STEM and at the same time improve their everyday language communication language abilities.

The main objectives of the English courses offered to the students during the Summer Intensive Course were as follows:

1) Listening

- Listening for main ideas or gists

- Listening for details

2) Reading

- Reading for main ideas or gists

- Reading for details

-Reading and guessing from context

-Assumptions and inferencing

3) Writing

-Parts of speech

-Writing Simple Sentences

-Writing Compound Sentences

At the end of the Summer Camp program, the students in both Ma'ady and October STEM Schools, sat for the Exit Exam that re-assessed the students' levels and accordingly, the students were placed in the appropriate levels in the regular afternoon classes during the first academic semester, 2014-2015. Some students were promoted to the Pre-Intermediate level while the rest of the students were placed in the Basic level. The Summer Camp was concluded with the "Students Final Evaluation of the Intensive English Classes and Materials". The main objective of this evaluation was to elicit the students' feedback for their first experience at the STEM schools with ELP and to elicit their suggestions to investigate and implement those appropriate in order to use in the STEM schools after-school program and in future Summer Camps.

-Description of the Assessment Plan for the Summer Course

The Summer Intensive Camp is not designed as a passing and failing course. Rather, it is designed to help students assess and evaluate their proficiency English level through the assessments, and to develop learning strategies that are effective in collaborative learning environments. Courses help students identify their language weaknesses and strengths to be able to perform well in his STM school subjects. The assessment planning for the Summer Intensive was designed as follows:

- 1) Vocabulary quizzes (5 marks)
- 2) Presentation 1 (A Talk) (10 marks)
- 3) Test 1 (Speaking) (10 marks)
- 4) Presentation 2 (Any Visual Aids presentation, using PPPTs, brochures, flyers, posters...etc.)
- 5) Final test (Listening, reading, vocabulary & writing) (15 marks)
- 6) Class participation (10 marks)
- 7) Portfolio (portfolio is assessed through the content and the organization) (30 marks)

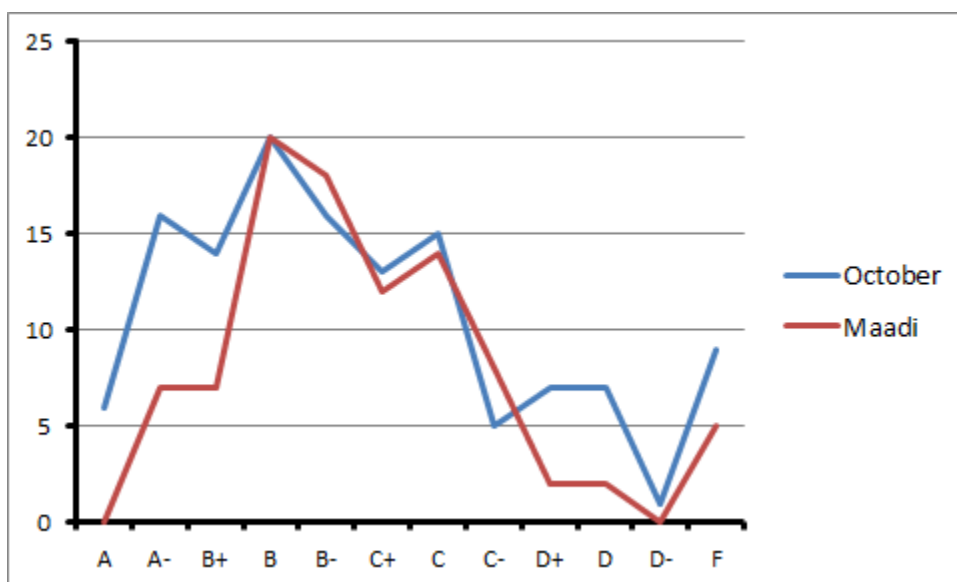
-Final Exam Results and Students' Performance during the Summer Course

The total number of new cohort of Grade 10 students who attended the Summer Intensive Course at both October and Ma'ady was 224. The total number of students attended at Maady School was 95 and as for October school it was 129.

A grading letter system was designed and used to grade and average students final marks. The following is the grading system as used:

Range of Grades	Equivalent Grading Letter
96-100	A
91-95	A-
88-90	B+
84-87	B
81-83	B-
78-80	C+
74-77	C
71-73	C-
68-70	D+
64-67	D
61-63	D-
0-60	F

Results of the final exam conducted for the students at the end of the Summer Intensive Course were analyzed. Analysis reveals that most of the students in both October and Ma'ady Schools achieved between B and C with scores between 77 and 90 out of 100. For Ma'ady School, the percentage of those achieved B is 21% and C is 15% as for October School, the percentage reached 16% for those who scored B and 12% for those who achieved C. This means as illustrated in graph B that the percentage of the boys achieving between B and C is higher than those of the girls.



Graph B- Comparison Between Ma'ady and October STEM School Scores Falling Between B and C

The following table (2) and graph B illustrate the scores division in both Ma'ady and October STEM Schools:

Range of Grades	Grading Letters	Number of students and Percentage	
		Ma'ady	October
96-100	A	(0/0%)	(6/5%)
91-95	A-	(7/7%)	(16/12%)
88-90	B+	(7/7%)	(14/11%)
84-87	B	(20/21%)	(20/16%)
81-83	B-	(18/19%)	(16/12%)
78-80	C+	(12/13%)	(13/10%)
74-77	C	(14/15%)	(15/12%)
71-73	C-	(8/9%)	(5/4%)
68-70	D+	(2/2%)	(7/5%)
64-67	D	(2/2%)	(7/5%)

61-63	D-	(0/0%)	(1/1%)
0-60	F	(5/5%)	(9/7%)

Table 2- A Summary for the grades and percentages for both Ma'ady and October STEM Schools

Table (2) also shows that the failing percentage of students at October school was higher than that at Ma'ady School. The difference is attributed to the fluctuation of attendance at October. Additionally, a considerable number of October students left school in the middle of the course. It is also significant that no students achieved A in Ma'ady school, while the percentage of A students at October reached 5%. This can be attributed to greater self- confidence among male students, entering the program at a higher proficiency level, and the stress of being away from parents (a particular challenge among female students). One recommendation is to pay more attention to those students who score in the D scores band during the next semester. We will do this through individual conferencing and assigning extra supplementary materials for them to address their problems concerning different language areas. For more information about the grades see July-September 2014-2015 Quarterly Report.

-Description of the Extensive Reading Courses during the Summer Course

The new cohort of grade 10 students was offered extensive reading sessions during the Summer Intensive Course. Research indicates that extensive reading helps STEM students improve their academic reading skills, vocabulary, grammar and written and oral proficiency. It also enables students to acquire all the reading sub-skills to help them improve their ability in understanding their major STEM content and subjects. The materials used for the extended reading during the two intensive weeks were "Starter" and "Level 1" from the Graded Readers. Graded Readers genres included: fiction, adventure, social, science fiction, romance, etc. and non-fiction, history, science, and biographies. An evaluation tracking sheet was used for the teachers to record students' reading progression throughout the Summer Intensive two weeks. The record sheet was designed in a way to keep track for students pace of reading at the end of each session for 8 days during the Intensive course. The teacher recorded the number of pages read by each student during the last 10 minutes of each session to be able to track at the end of the summer course if the pace of the student has improved or not. The duration of each session in both October and Maady is 1 hour. It always comes at the end of the day (the 4th session).

Teachers in both schools reported verbally that students benefitted from the extended reading. They credit reading extensively with students' broader use of vocabulary words and complex language structures in their writings and presentations. Students themselves emphasized the beneficial impact of extensive reading in the qualitative comments they wrote in the course evaluation.

b. Regular afternoon ELP classes

The total number of students who joined the evening English classes at Ma'ady school is 116 and for October 139. A new curriculum was designed for the new cohort of Grade 10 students for the first academic semester (2014-2015). The course is called "Basic Level." It covers different themes such as happiness, sociology (urban and migration), memory process, human body and psychology. Students who joined the Basic level are those who achieved between A1 (0-2.75) and A2+ (4.0-4.25) on baseline exam they took on the first day of the Summer Intensive. The second level offered to students is called Pre-Intermediate. Students who joined the Pre-Intermediate level were selected based not only on getting in the baseline exam above A2+ but a rating of B1 or above in the reading and the writing skill. Themes for the Pre-Intermediate vary between migration, health and body and body abilities and fear and human migration. There is a focus on different language skills in both levels including the sub-skills for listening, reading, speaking and writing. In addition, each session starts with 20 minutes for the extensive reading (Graded Readers levels 1, 2 and 3). The same assessment strategy is used for both Basic and Pre-Intermediate.

During the last three weeks, starting from week 7 to till week 9, a new component focusing on STEM vocabulary was added to the Basic and Pre-Intermediate levels. This addition to the curriculum was based on recommendation made school administrations, subject teachers and students. This initiative aims at teaching the STEM vocabulary related to core STEM subjects - physics, Math, biology and chemistry. Subject teachers shared the STEM vocabulary with the ELP and recommended the STEM vocabulary that is significant and essential for students to understand their subjects. These vocabulary words were integrated in the afternoon English courses offered for Grade 10. The main objective here also is to teach the selected vocabulary in an interactive, communicative and contextualized method.

Starting from week 7 till the end of the course, each session was divided into 30 minutes for the extended reading, 1 hour for the language focus, and 30 minutes for explicit focus on STEM vocabulary.

Different resources were used for compiling the materials including books such as Pathways 2 & 3: Listening, Speaking and Critical Thinking Skills, Reading and Writing and Critical Thinking Skills, Active Skills for Reading, Great Paragraphs and Idioms for Everyday Use.

English Levels:	Basic & Pre-Intermediate Levels	Course Start Date:	September 28 st , 2014
Grade:	10	Course End Date:	December 17 th , 2014
Academic Semester:	2014/2015, first semester		
Course Duration:	11 Weeks; 2 sessions per week, 2 hours per session, and 44 hours in total.		

-Description of the English Course: Level 1 (Basic Level)

This is an English language project based regular course that aims at developing the four language skills: reading, listening, writing and speaking. It also aims at improving the communicative competency and the fluency of your speaking and writing skills using communicative material to successfully be engaged and active in class. **Courses Goal for Basic:**

This course aims to improve the language skills students need to successfully complete STEM school coursework and projects. The course will improve student's English communication skills, presentation skills and writing skills through interactive lessons.

Course Materials for Basic: Student Pack:

1. Compiled materials from the following text books:

- Pathways 2: Reading, Writing and Critical Thinking. National Geographic Learning: Heinle Cengage Learning
- Pathways 2: Listening, Speaking and Critical Thinking. National Geographic Learning: Heinle Cengage Learning
- Pathways 3: Reading, Writing and Critical Thinking. National Geographic Learning: Heinle Cengage Learning
- Pathways 3: Listening, Speaking and Critical Thinking. National Geographic Learning: Heinle Cengage Learning
- Active Skills for Reading. Heinle
- Great Paragraphs. Heinle Cengage Learning
- Idioms for Everyday Use. National Textbook Company

2. Online Resources

Supplementary Material and teaching aids: To be prepared by teachers according to the students' needs and the course general goal and objectives.

-Description of the Assessment Plan: Level 1 (Basic Level)

The Basic Course is based on a pass/fail system, where students' attendance, participation and performance all contribute to their final grade. The pass score is 61%. Students will be asked to complete a number of tests and assignments as well as a presentation and submit the course portfolio. The distribution of the grade unfolds in the table below:

Assessment Strategies	Assessment Content	Week/ Date	Weight
Test 1	Reading, Listening, Vocabulary and Writing	(Week 5) Session 1	10 %

Presentation 1	Talk	(Week 6) Session 2 AND (Week 7) Session 1	10%
Vocabulary Quizzes	2 vocabulary quizzes on target vocabulary (Listening & Reading) studied each unit	Quiz 1: (Week 4)Session 2 Quiz 2: (Week 8) Session 2	5%
Portfolio	Portfolio Items	(Week 10) Session 2	30 %
Final Test	Speaking Reading, Listening & Writing (RWL)	Part 1, Speaking: (Week 10) Session 1 Part 2, RWL: (Week 10) Session 2	20%
Final Presentation	Any visual aid (poster, PPPT, brochure...etc)	(Week 11) Sessions 1 & 2	15 %
Total: /100			

-Description of the English Course: Level 2 (Pre-Intermediate Level)

This is an English language project based regular course that aims at developing the four language skills: reading, listening, writing and speaking. It also aims at improving the communicative competency and the fluency of your speaking and writing skills using communicative material to successfully be engaged and active in class.

Courses Goal for Pre-Intermediate:

This course aims to improve the language skills students need to successfully complete STEM school coursework and projects. The course will improve student's English communication skills, presentation skills and writing skills through interactive lessons.

Course Materials:

-Active Skills for Reading. National Geographic Learning: Heinle Cengage Learning

- Pathways 3: Listening, Speaking and Critical Thinking. National Geographic Learning: Heinle Cengage Learning

-Great Paragraphs 3. Heinle Cengage Learning

-Reading Explorer 3. Heinle Cengage Learning

Supplementary Material and teaching aids: To be prepared by teachers according to the students' needs and the course general goal and objectives.

-Description of the Assessment Plan: Level 2 (Pre-Intermediate Level)

The Pre-Intermediate Course is based on a pass/fail system, where students' attendance, participation and performance all contribute to their final grade. The pass score is 61%. Students will be asked to complete a number of tests and assignments as well as a presentation and submit the course portfolio. The distribution of the grade unfolds in the table below:

Assessment Strategies	Assessment Content	Week/ Date	Weight
Test 1	Reading, Listening, Vocabulary and Writing	(Week 5) Session 1	10 %
Presentation 1	Talk	(Week 6) Session 2 AND (Week 7) Session 1	10%
Vocabulary Quizzes	2 vocabulary quizzes on target vocabulary (Listening & Reading) studied each unit	Quiz 1: (Week 4)Session 2 Quiz 2: (Week 8) Session 2	5%
Portfolio	Portfolio Items	(Week 10) Session 2	30 %
Final Test	Speaking Reading, Listening & Writing (RWL)	Part 1, Speaking: (Week 10) Session 1 Part 2, RWL: (Week 10) Session 2	20%
Final Presentation	Any visual aid (poster, PPPT, brochure...etc)	(Week 11) Sessions 1 & 2	15 %
Total: /100			

II. Grade 11

-Description of the English Conversation Level

Grade 11 STEM school students in both Ma'ady and October schools were only offered Conversation level, as per as their current ELP level. Students who joined the Conversation course were those who passed the Pre-Intermediate level in Second Semester 2013-2014.

As per the students' earlier requests, the main objectives of the Conversation course was to cater the students' needs in order to enhance their communication, presentation and debates skills. Additionally, as per the students follow up needs assessment and requests, by week 5 during the semester, the Conversation course provided the students with the necessary orientation and basic practice skills; Reading, Listening, Speaking, and Writing for the TOEFL. The TOEFL materials were edited to match the main objectives of the regular Conversation course.

I. Week One to Five:

The anticipated course outcomes for the Conversation level; Week 1 to 5 were as follow:

Week #	Unit Outcome:
Week 1	Main Theme: Do you like your name? <i>Q: Skills for Success – Listening and Speaking</i>
	Interview a classmate and introduce him/her to the class.
Week 2	Main Theme: Why do we study other cultures? <i>Book: Q: Skills for Success – Listening and Speaking</i>
	Give a presentation about customs in a culture you might know or do not know.
Week 3	Main Theme: What makes a happy ending? <i>Book: Q: Skills for Success – Listening and Speaking</i>
	Participate in a group discussion about bad situations with happy endings.
Week 4	Main Theme: Free time, hobbies <i>Book: New Headway Talking Point</i>
	Give a talk about his/her hobbies
Week 5	Main Theme: What is the best kind of vacation: <i>Book: Q: Skills for Success – Listening and Speaking</i>
	Give a presentation describing a tour to a popular travel destination

The Materials for the Conversation level, Week 1 to 5 were, were adapted and compiled from different academic sources as follow:

- Pathways 4: Reading, Writing and Critical Thinking.
National Geographic Learning: Heinle Cengage Learning

- Headway Talking Points, Oxford University Press
- Q: Skills for Success, Listening and Speaking, Oxford University Press
- Academic Connections 4, Pearson Longman.
- 400 MUST HAVE Words. McGraw-Hill's
- Cambridge Preparation for the TOEFL Test
- Cambridge English IELTS, Cambridge University Press
- Idioms for everyday Use, Milada Broukal

Supplementary Material and teaching aids: To be prepared by teachers according to the students' needs and the course general goal and objectives.

II. Week Six to Ten:

As per the students follow up needs assessment and requests, by week 5, the Conversation course objectives have been edited and the conversion materials have been adapted to provide the students with the necessary orientation and basic practice skills; Reading, Listening, Speaking, and Writing for the TOEFL. It is worth mentioning that The TOEFL materials were edited to match the main objectives of the regular Conversation course.

The anticipated course outcomes for the Conversation level; Week 6 to 10 were as follow:

Week #	Covered Skills	Sources
Week 6	Debate 1 Reading Listening Speaking Writing Vocabulary/ Idioms Independent Materials	<ul style="list-style-type: none"> - Academic Connections 4, Pearson Longman. - 400 MUST HAVE Words. McGraw-Hill's - Cambridge Preparation for the TOEFL Test - Cambridge English IELTS, Cambridge University Press - Idioms for everyday Use, Milada Broukal - Supplementary Online Resources
Week 7	Speaking Writing; W.6 Collective Feedback W. 7 W. Reading Listening Vocabulary/ Idioms Independent Materials	
Week 8	Presentation 2 Speaking Writing; W.7 Collective Feedback W. 7 W. Reading	

	Listening Vocabulary/ Idioms Independent Materials	
Week 9	Speaking Writing; W.8 Collective Feedback W. 7 W. Reading Listening Vocabulary/ Idioms Independent Materials	
Week 10	Debate 2 Course Closure; STEM got Talent	

A collective sheet was designed for the students for extra language and independent support. This collective sheet combines different useful websites and list of soft books covering different language skills and areas of weakness in Reading, Listening, Speaking, and Writing. The lists were suggested by all the English Language Program team members and the teachers. Teachers used this compiled list with the students during the individual conferencing and feedback sessions and were included in the collective progression reports as well as the individual feedback reports e-mailed to the students for future assistance and guidance.

-Description of the Assessment Plan

The Conversation Course is based on a pass/fail system, where students' attendance, participation and performance all contribute to their final grade. The pass score is 61%. Students were required to complete a number of presentations and debates along the semester time. The distribution of the grade unfolds in the table below:

Assessment Strategies	Assessment Content	Week/ Date	Weight
Talk # 1	A Talk	(Week 2)	20%
Presentation # 2	Presentation 1	(Week 4)	20%
Presentation # 3	Debate 1	(Week 6)	20%
Debate # 4	Presentation 2	(Week 8)	20%
Debate # 5	Debate 2	(Week 10)	20%
Total:			100%

For the future modifications, as per the students' requests and teachers' suggestions, lower grades shall be dedicated to the first Talk in the upcoming semester and more grades shall be added to the final Presentation and debate. By that time, early in the semester, students are still vulnerable for doing more mistakes and need to enhance their learning process before being introduced to the Presentation and debates. By the time of the final Presentation and Debate, the students should have gained the necessary skills to show their progress along the course duration.

4. Student Attendance

In previous semesters, it was observed that the attendance policy was not strong enough to motivate the students to attend regularly. Accordingly, the attendance policy was changed for this academic year. Students who were absent more than four times during the course were not allowed to pass to the next level. This new attendance policy was announced to the students by teachers and was shared with the school principals. Student Union representatives were also requested to share the announcement officially with all the students in both schools.

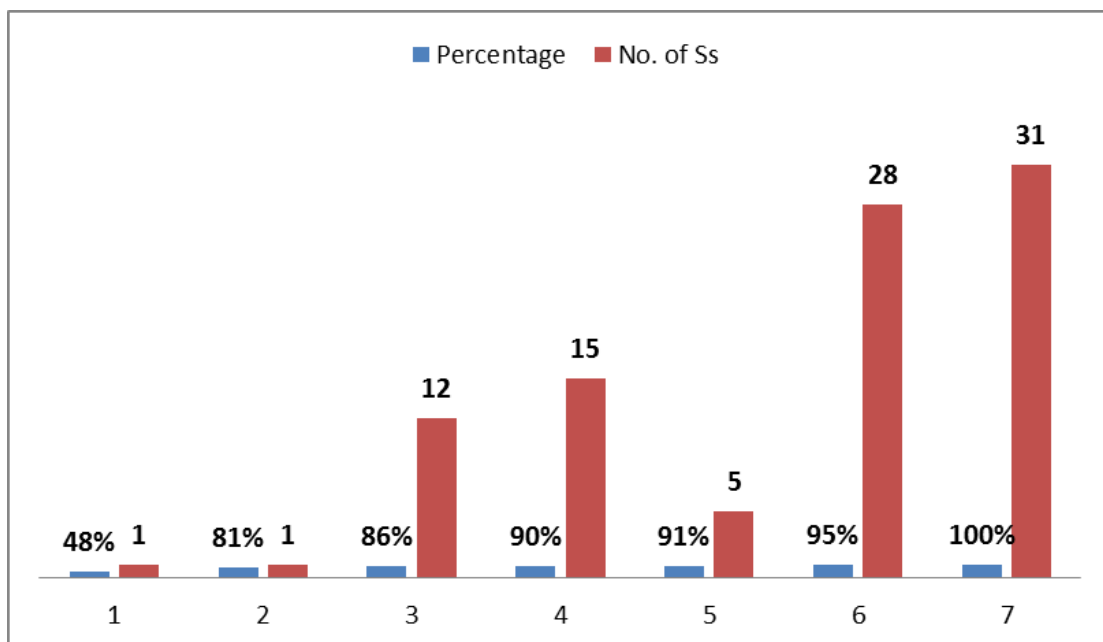
I. Grade 10 Attendance

Students' attendance was quite high in Grade 10 for both Basic and Pre-Intermediate levels in both schools: October and Ma'ady. This noticeable high significant percentage can be attributed to the need of the majority of grade 10 students to improve their English proficiency level. This factor encouraged them to attend regularly. One of the factors that encouraged students to attend the ELP classes is that the curriculum content addressed mostly their language needs and interests as mentioned in the qualitative data collected in the final course evaluation. The interactive and communicative methods of teaching also contributed to the significant raise in the attendance percentage in comparison to last year. Finally, students reported that they managed to maintain a balance between their school loads and attending the afternoon ELP classes. The new attendance policy, though not mentioned by students in course evaluations, may have played a role in improved attendance this academic year.

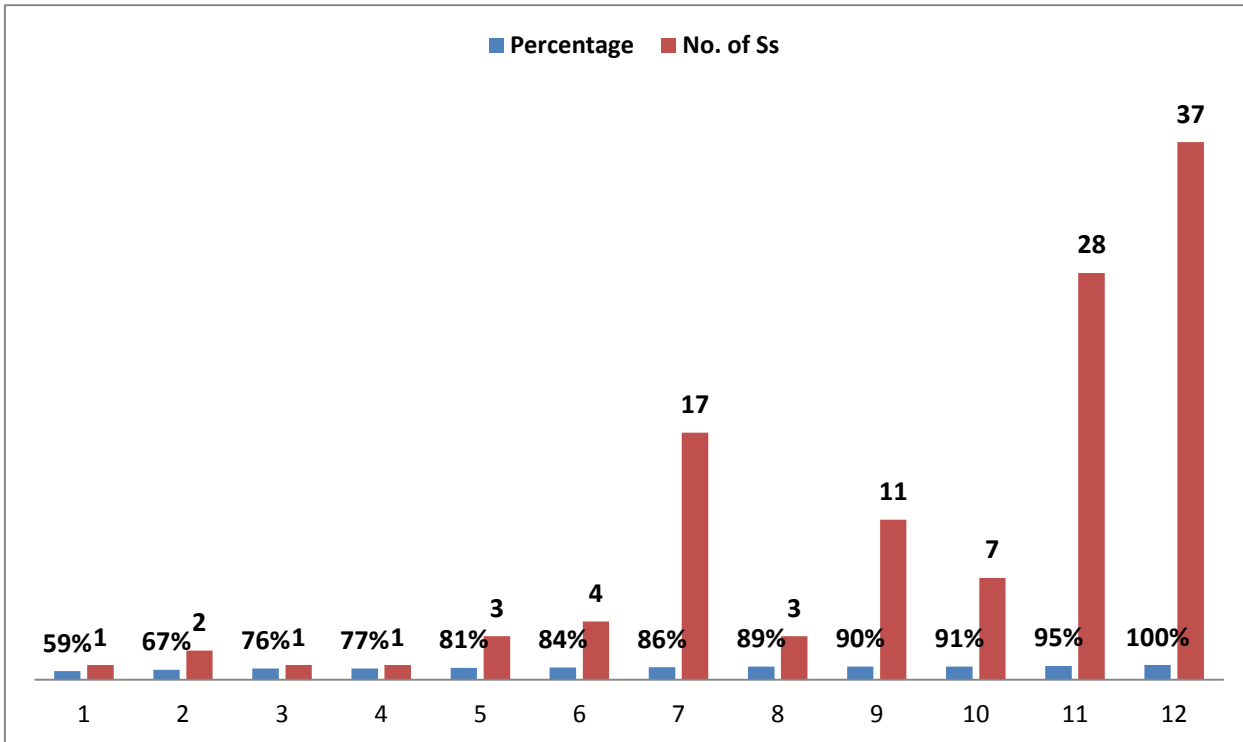
The following table (3) illustrates the attendance percentages for grade 10-Basic Level in both schools

Ma'ady School		October School	
Ranges of Attendance Percentage	No. of Students	Attendance Percentage	No. of Students
48%	1 student	0%	1 student
81%	1 student	59%	1 student

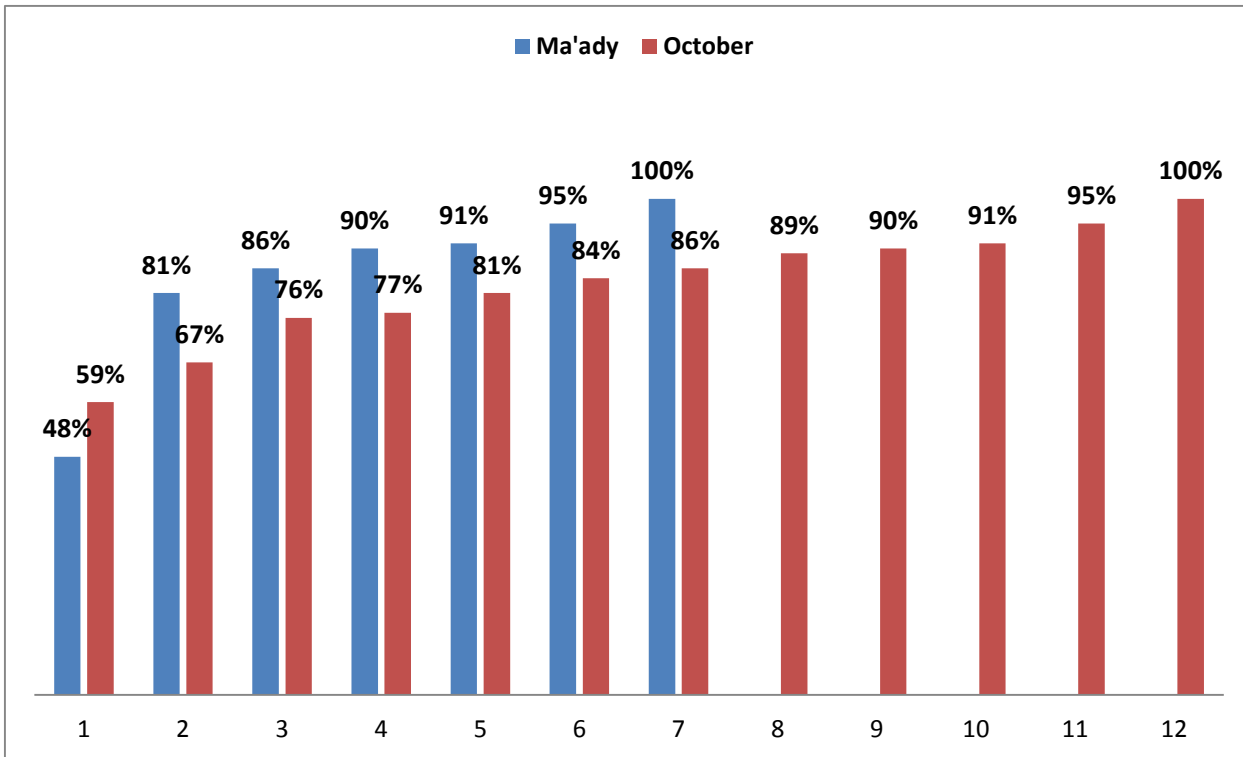
86%	12 students	67%	2 students
90%	15 students	76%	2 students
91%	5 students	77%	1 student
95%	28 students	81%	3 students
100%	31 students	84%	4 students
		86%	17 students
		89%	3 students
		90%	11 students
		91%	7 students
		95%	28 students
		100%	37 students



Graph C- Illustrates the Attendance Percentage in the Basic Level at Ma'ady School



Graph D- illustrates the Attendance Percentage in the Basic Level at October School

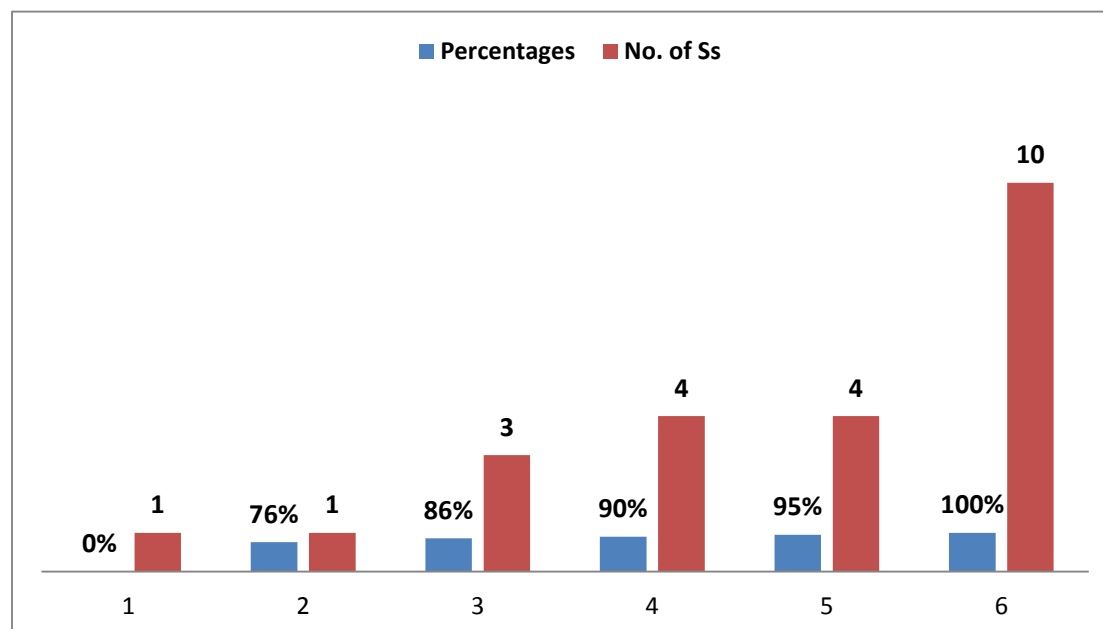


Graph E- Compares between the Attendance Percentage in the Basic Level at both Ma'ady and October Schools

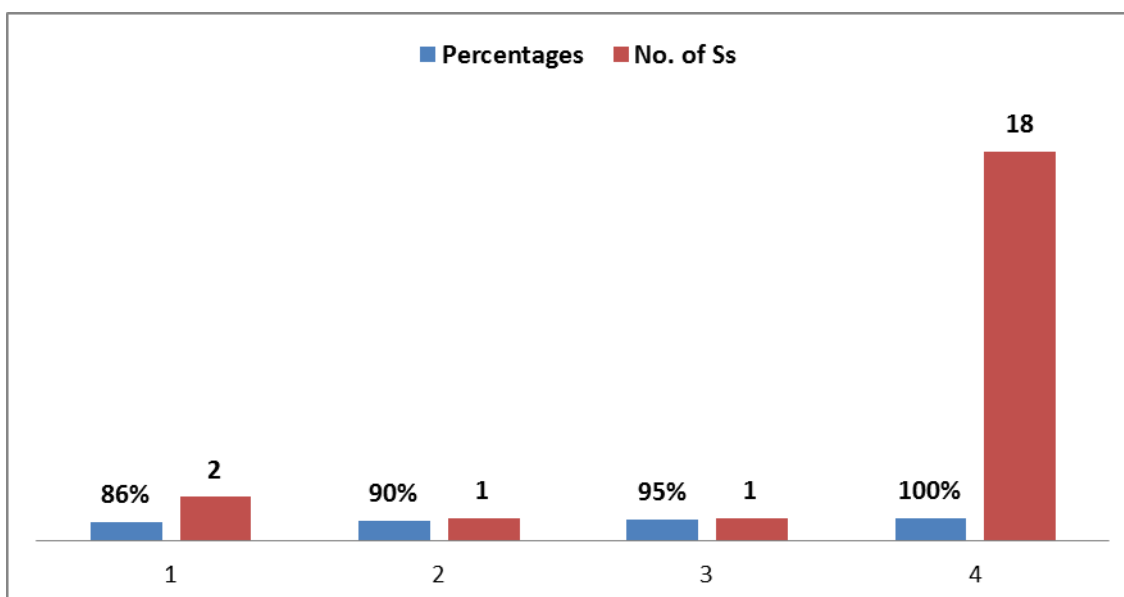
The above table (3) and graph (c), (D) and (E) show that the attendance percentage ranges at October school vary more than that at Ma'ady school. They also show that both schools have high percentage of full attendance (100%) and that the lower attendance percentage at October school is 0% while that at Ma'ady school is 48%.

The following table (4) illustrates the attendance percentages for grade 10-Pre-Intermediate Level in both schools

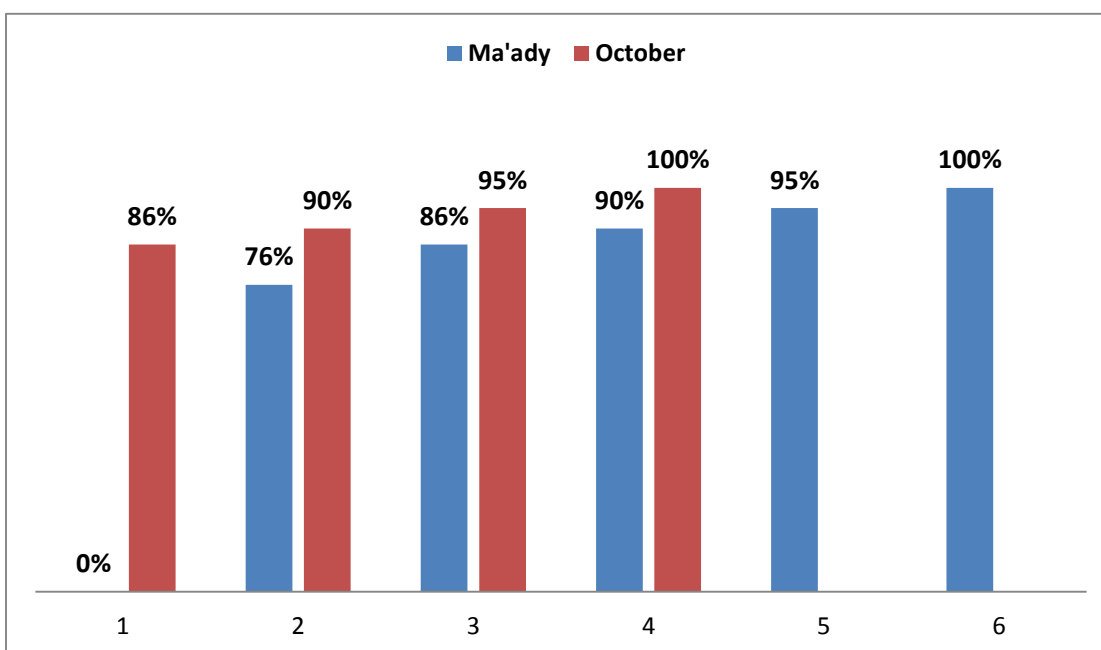
Ma'ady School		October School	
Attendance Percentage	No. of Students	Attendance Percentage	No. of Students
0%	1 student	86%	2
76%	1 student	90%	1
86%	3 students	95%	1
90%	4 students	100%	18
95%	4 students		
100%	10 students		



Graph F - Illustrates the Attendance Percentage in the Pre-Intermediate Level at Ma'ady School



Graph G- Illustrates the Attendance Percentage in the Pre-Intermediate Level at October School



Graph H- Compares Between the Attendance Percentage in the Pre-Intermediate Level at both Ma'ady and October Schools

The above table (4) and graphs (F), (G) and (H) indicate that the attendance percentage ranges at Ma'ady school vary more than that at Ma'ady school because the number of students joining Pre-Intermediate level at Ma'ady is quite bigger than that at October with a difference 1 student: 22 students at October and 23 at Maady. They also show that the majority of students at both schools have

high percentage of full attendance (100%) and that the lower attendance percentage at October school is 86% while that at Ma'ady school is 0% as a no show case.

II. Grade 11

When investigating the reason behind grade 11 students' earlier low attendance, they attributed it to the short academic term and to their noticeable academic work load. However, it is significant that once the new attendance policy was set and announced to the students, the attendance of grade 11 students in both schools showed a noticeable incline in comparison to their attendance in the past academic semesters. Teachers reported that Grade 10 students, in general, showed less resistance and a slight more commitment to attend the English classes, as they were less overwhelmed with the STEM school structure and load than the first academic semester.

The following table illustrates the attendance level in for grade 11 in both October and Ma'ady schools.

Grade 11	Week 1 : 5		Week 6 : 11	
	October School	Ma'ady School	October School	Ma'ady School
	73%	77%	86%	89%

As shown in the table above, grade 11 students' attendance in Maady STEM School has always been better than in October STEM School. The gender difference might have impacted the students' attendance commitment in both schools.

5. Exam Results and Students' Performance for Grade 10 and 11

A grading letter system has been designed and used since the beginning of the ELP services to grade and average students' final marks. The following is the grading system has been used:

96-100	91-95	88-90	84-87	81-83	78-80	74-77	71-73	68-70	64-67	61-63	0-60
(A)	(A-)	(B+)	(B)	(B-)	(C+)	(C)	(C-)	(D+)	(D)	(D-)	(F)

I. Grade 10

Regular Afternoon ELP Classes

a. Level 1: Basic Level

The total number of new cohort of Grade 10 students who attended the afternoon English classes at both October and Ma'ady was 255: 116 at Ma'ady school and 139 at October school. The total number of students attended the Basic Level at Ma'ady School was 93 and 23 attended the Pre-Intermediate level. As for the total number of students who attended the Basic level at October, it was 117 and 22 attended the Pre-Intermediate level.

The grading system which was used in grading the final exam for the Summer Course was used in the first academic semester (2014-2015) for both the Basic and the Pre-Intermediate levels.

An Exit exam was conducted for the Basic and the Pre-Intermediate levels, it was of the same components and structure of the Baseline exam; as the purpose of the Exit exam is to re-evaluate the English proficiency level of the students and to place them in the English level based on the CEFR band and proficiency ratings decided by the ELP during this semester. For more information about the CEFR bands and the ELP levels, see Appendix B.

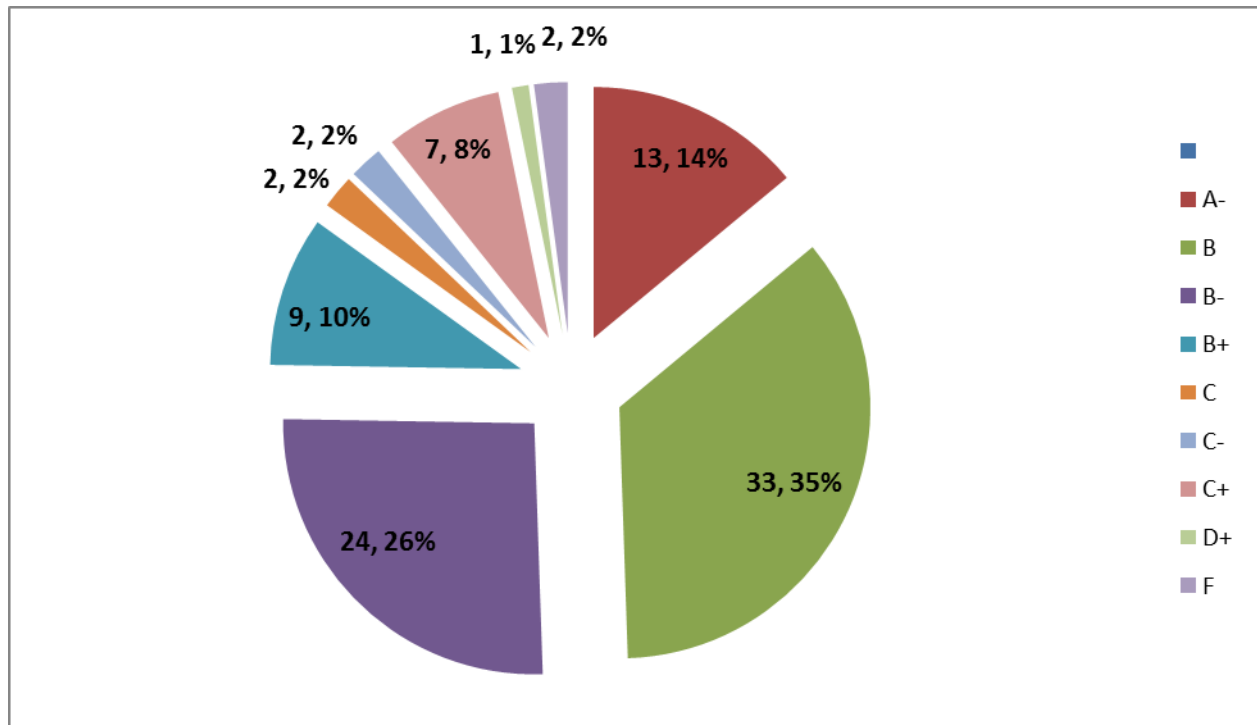
A Conversion chart was designed to get the final exam equivalency from the Exit exam to complete the coursework grades for both the Basic and the Pre-Intermediate levels (See Appendices C and D). Due to the writing task level, which was appropriate to students' level, the basic level exit writing exam score Basic level was a 5.75.

The following table (5) and graphs (I), (J) and (K) illustrate the scores division for the Basic level in both Ma'ady and October STEM Schools:

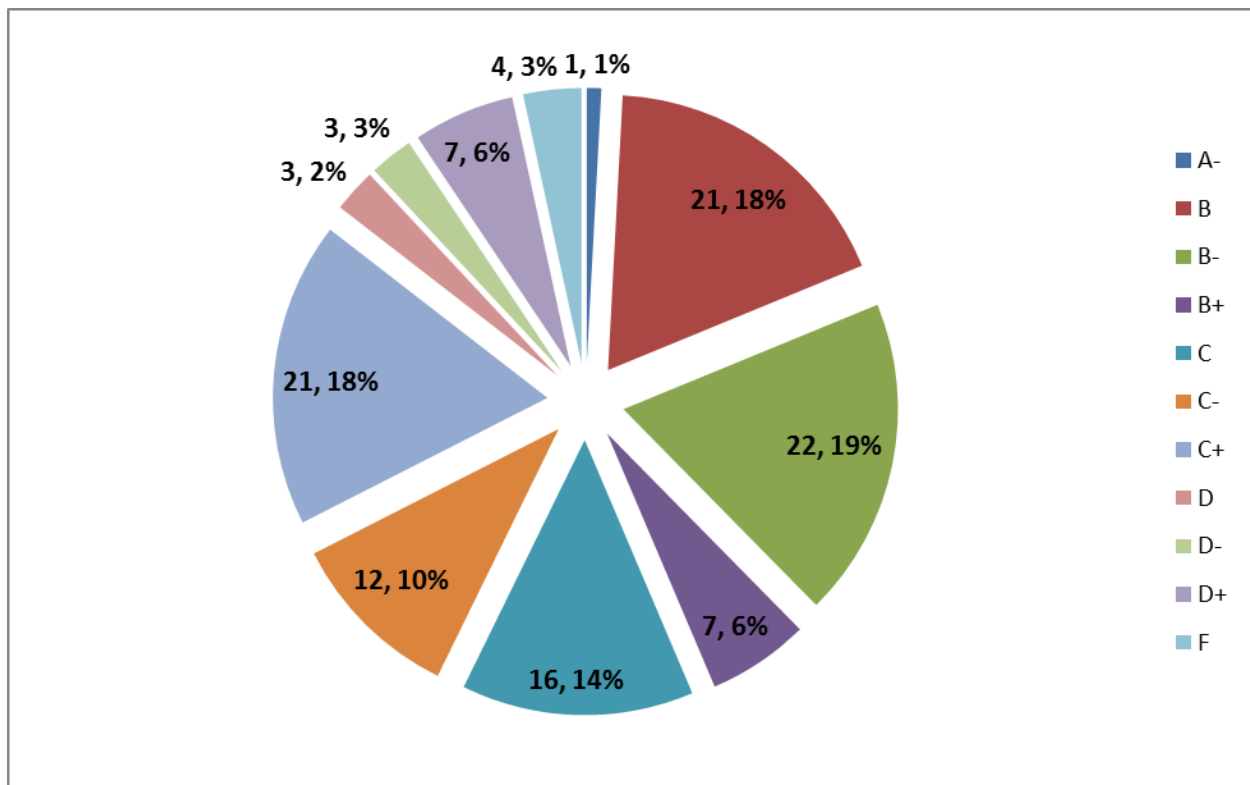
Range of Grades	Grading Letters	Number of students and Percentage	
		Maady	October
96-100	A	0 (0%)	0 (0%)
91-95	A-	13 (14%)	1 (1%)
88-90	B+	9 (10%)	7 (6%)
84-87	B	33 (36%)	21 (18%)
81-83	B-	24 (26%)	22 (19%)
78-80	C+	7 (8%)	21 (12%)
74-77	C	2 (2%)	16 (14%)
71-73	C-	2 (2%)	12 (10%)
68-70	D+	1 (1%)	7 (6%)

64-67	D	0(0%)	2 (2%)
61-63	D-	0 (0%)	3 (3%)
0-60	F	2 (2%)	4 (3%)

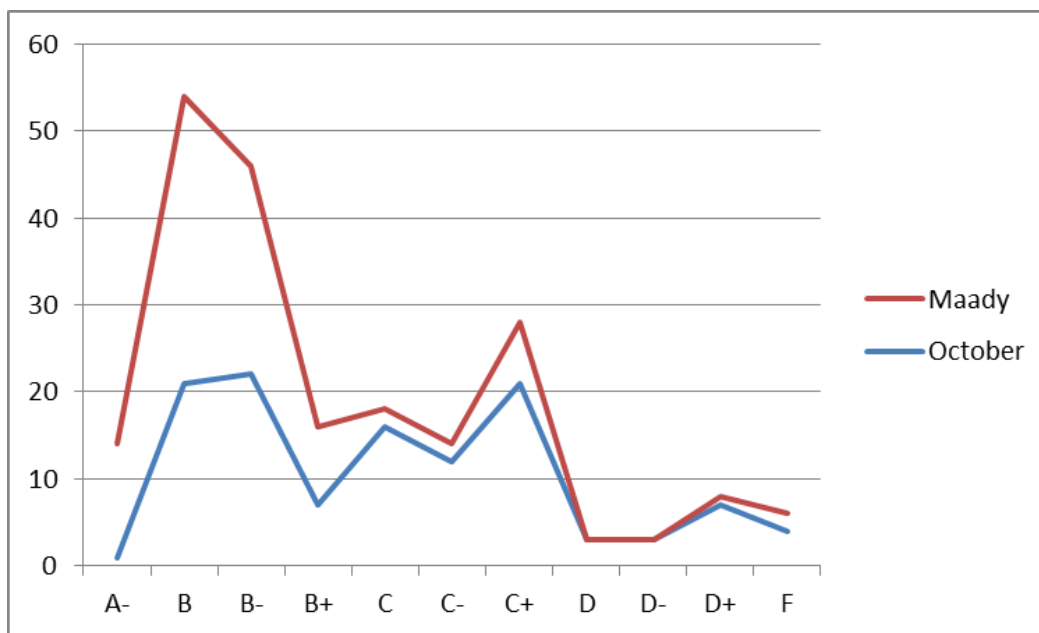
Table 5- A Summary for the grades and percentages for both Ma'ady and October STEM Schools for the Basic Level- Semester 1 (2014-2015)



Graph I- Illustrates the Grades and the Percentages for the Basic Level- Ma'ady School



Graph J - Illustrates the Grades and the Percentages for the Basic Level-October School

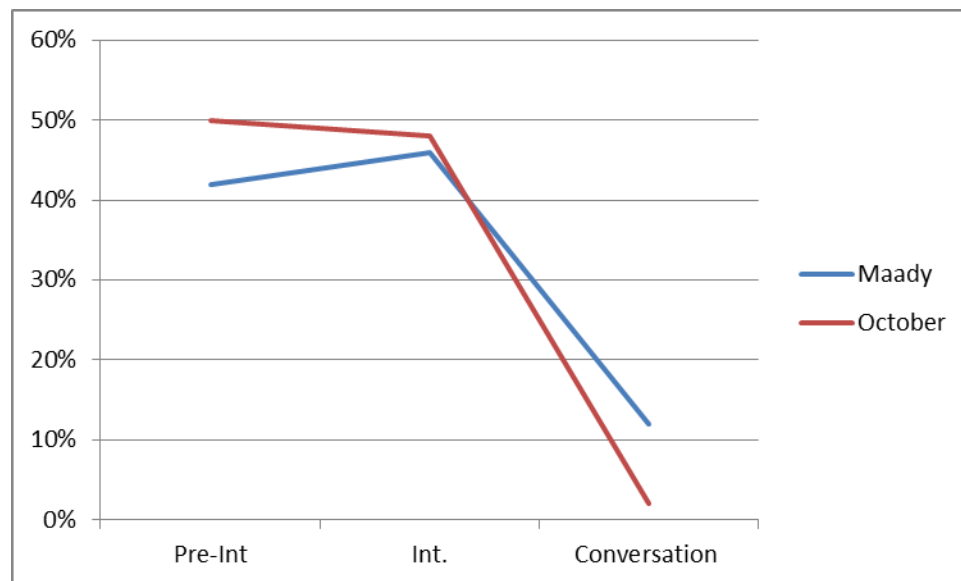


Graph K- Comparison Between Ma'ady and October STEM School Scores Falling Between B and B- for the Basic Level

Results of the final exam and the total coursework conducted for the students at the end of the afternoon English classes were analyzed. Analysis of the above table 5 and graphs (I), (J) and (K) reveals that most% students achieved course objectives (98% in Al Ma'ady and 97% in October). Most students in both schools achieved between B and B- with scores between 81 and 84 out of 100. For Ma'ady School, the percentage of those achieved B is 36% and for those achieved B- 26%. As for October School, the percentage reached 18% for those who scored B and 19% for those who achieved B-. As illustrated in graph (K), the percentage of the girls achieving between B and B- is higher than those of the boys.

Table (5) also shows that the failing percentage of students at October school was higher than that at Ma'ady School due to the low total marks of the coursework and the lack of persistence of those failing students to complete some parts of the coursework requirements, especially presentations. In addition, it was also significantly noted that the no students achieved A in Maady school, while the percentage of A students at October school reached 1 %. In addition the percentage of students achieving A- at Ma'ady school is 13%, whereas that at October school is only 1%. This can be attributed to some affective reasons including self- confidence. It is worth mentioning that some students at October school achieved low total grades ranging between D+ and D with percentages ranging between 2%-6%; whereas at Ma'ady school, the percentage of students achieving D+ is 1%. This can be attributed to that the self-independency and the willingness of improving the Proficiency English level among the girls is higher relatively than the boys.

However, the grades of the coursework did not affect the promotion of students from the Basic level to the Intermediate and Conversation levels. The following graph (L) compares between the percentage of students joining the higher levels at both Ma'ady and October schools in the second academic semester (2014-2015):



Graph L - A Comparison Between the Percentages of Basic Students Joining the Higher ELP Levels at Both Ma'ady and October STEM Schools

Graph (L) shows that the percentage of students joining the Pre-Intermediate level at October school (50%) is higher than those from girls joining the same level (42%). As for those joining the Intermediate

level which is higher than the Pre-Intermediate, the percentage of the boys is (48%) and those of the girls is (46%). This indicates that the difference between the two schools for joining the Intermediate level is relatively small. As for the Conversation level, the difference in the percentages between the boys and the girls is very high: 12% for the boys and 2% for the girls.

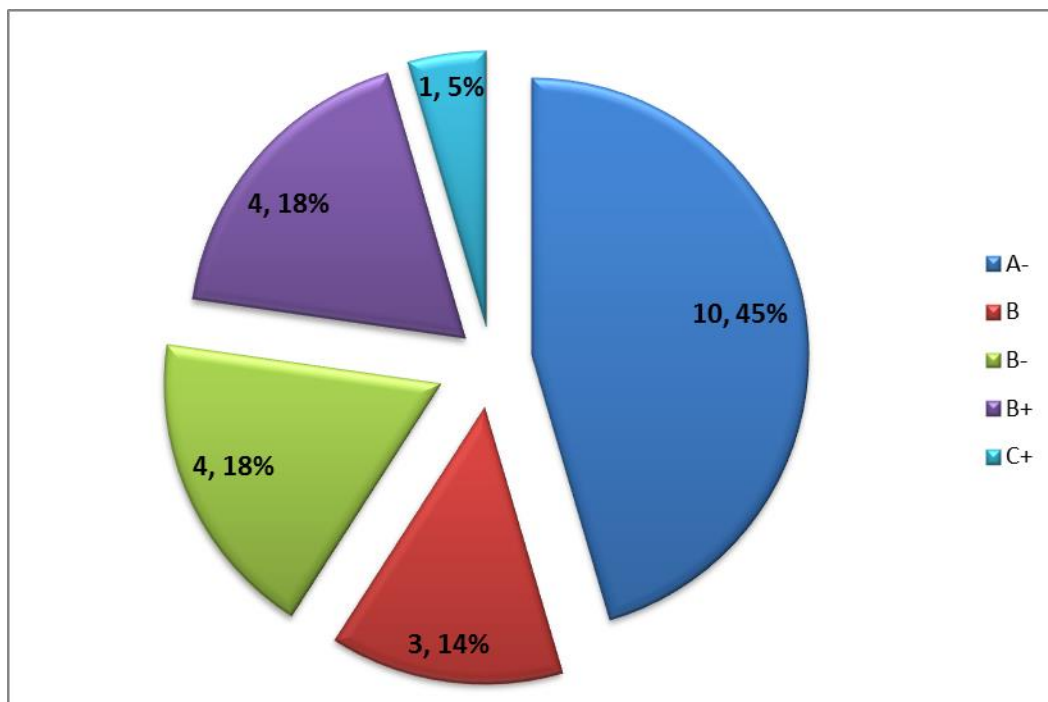
Based on the above mentioned data, one of the recommendations to consider for the next semester is to adapt the content of the Pre-Intermediate and the Intermediate levels to suit the language interests of the boys and the girls. In addition, more fun teaching aids will be used to make students more into the courses.

b. Level 2: Pre-Intermediate Level

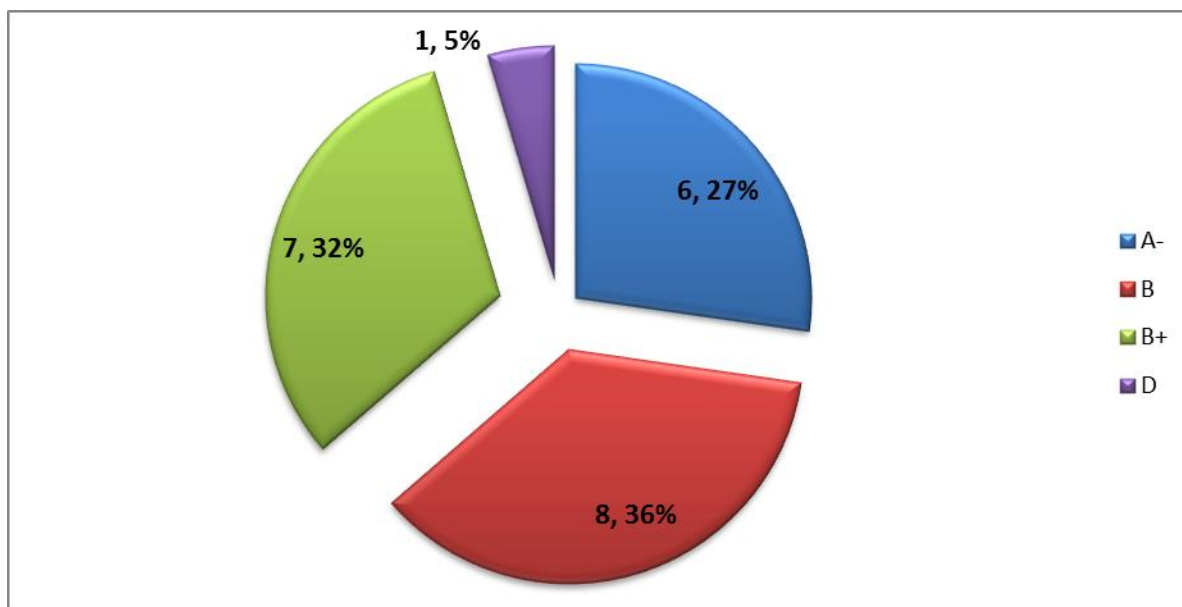
The following table (6) and graphs (M), (N) and (O) illustrate the scores division for the Pre-Intermediate level in both Ma'ady and October STEM Schools:

Range of Grades	Grading Letters	Number of students and Percentage	
		Ma'ady	October
96-100	A	0 (0%)	0 (0%)
91-95	A-	10 (45%)	6 (27%)
88-90	B+	4 (18%)	7 (32%)
84-87	B	3 (14%)	8 (36%)
81-83	B-	4 (18%)	0 (0%)
78-80	C+	1 (5%)	0 (0%)
74-77	C	0 (0%)	0 (0%)
71-73	C-	0 (0%)	0 (0%)
68-70	D+	0 (0%)	0 (0%)
64-67	D	0 (0%)	1 (5%)
61-63	D-	0 (0%)	0 (0%)
0-60	F	0 (0%)	0 (0%)

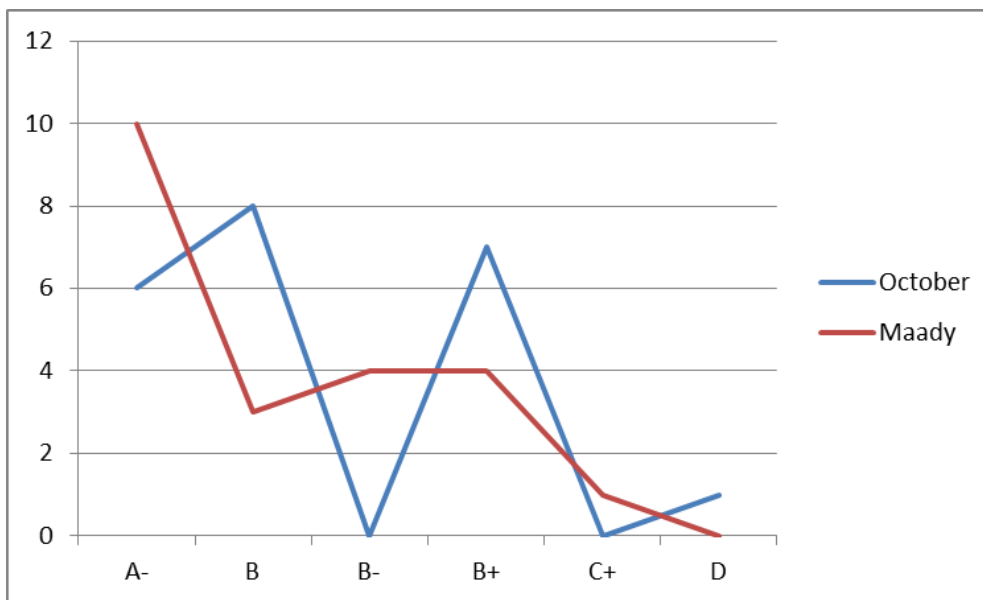
Table 6- A Summary for the grades and percentages for both Ma'ady and October STEM Schools for the Pre-Intermediate Level- Semester 1 (2014-2015)



Graph M- Illustrates the Grades and the Percentages for the Pre-Intermediate Level- Ma'ady School



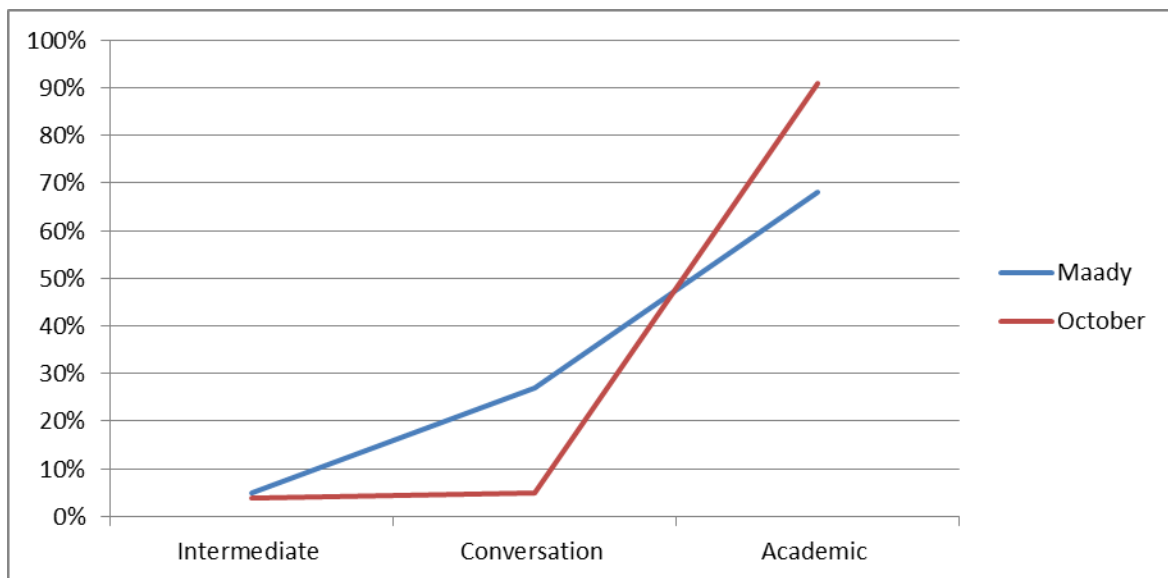
Graph N- Illustrates the Grades and the Percentages for the Pre-Intermediate Level- October School



Graph O- Comparison Between Ma’ady and October STEM School Scores Failing Between A- and B+ for the Pre-Intermediate Level

Results of the final exam and the total coursework conducted for the students at the end of the Pre-Intermediate afternoon English classes were analyzed. Analysis of table (6) and graphs (M), (N) and (O) reveals that most of the Pre-Intermediate students in October school fall between B and B+ with 36% and 32%. As for Maady school, the majority of the students scored A- (45%). This indicates that the scores at Ma’ady school are higher than that at October school as shown in graph O above.

Table (6) and graphs (M) and (N) show that there was no failing percentage for the Pre-Intermediate students at both October and Ma’ady schools. Students at both schools were eager to complete their coursework requirements and pass the course with high grades. Also, no indications for D grades at Ma’ady school; however, 5% of students at October school achieved D.



Graph P- A Comparison between the Percentages of Pre-Intermediate Students Joining the Higher ELP Levels at Both Ma’ady and October STEM Schools

Looking at the Exit scores of the Pre-Intermediate students in both schools, as shown in graph (P) above, it is worth mentioning that the percentage of Pre-Intermediate students joining the Academic level at October school (91%) is higher than that at Ma’ady school (68%). However, the percentage of students joining the Conversation level at Ma’ady school (27%) is higher than those at October school (5%). As for the percentage of students joining Intermediate level at both schools, it is relatively close (5%) at Ma’ady school and (4%) at October school.

C. A Comparison between the Baseline and Exit Exam Scores

The total number of new cohort of Grade 10 students who attended the Exit Exam at both October and Ma’ady was 255: 116 at Ma’ady school and 139 at October school. The components and the structure of the Exit Exam followed the same that of the Baseline exam for both the Basic and the Pre-Intermediate levels. The only difference between the Exit exam versions for the two levels is the following:

- The difficulty of reading and listening passages in both levels
- Students in the Basic level write an opinion/descriptive paragraph, whereas in the Pre-Intermediate, they write a problem-solution essay.

The following table (7) is a comparison for the total Baseline exam grades and the Exit exam at Ma'ady school:

Range of Overall Proficiency Rate	Grading Letter, Number and Percentage (Ma'ady School)	
	Baseline Exam	Exit Exam
0-2.75	A1 (2/2%)	A1 (2/2%)
3.0-3.25	A2-(21/7%)	A2- (0 /0%)
3.5-3.75	A2 (25/20%)	A2 (15 /13%)
4.0-4.25	A2+ (48/39%)	A2+ (24/20%)
4.5-4.75	B1- (8/7%)	B1- (18/ 15%)
5.0-5.25	B1 (13/11%)	B1 (27/23%)
5.5-5.75	B1+ (1/1%)	B1+ (17/14%)
6.0-6.25	B2- (1/1%)	B2- (3/3%)
6.5-6.75	B2 (0/0%)	B2 (6/5%)
7.0-7.25	B2+ (3/2%)	B2+ (6/5%)
7.5-7.75	C1- (0/0%)	C1- (0/0%)
8.0-8.25	C1 (0/0%)	C1 (0/0%)
8.5-8.75	C1+ (0/0%)	C1+ (0/0%)
9	C2 (0/0%)	C2 (0/0%)

Table 7 -Compares Between Baseline and Exit Grades –Ma'ady STEM School

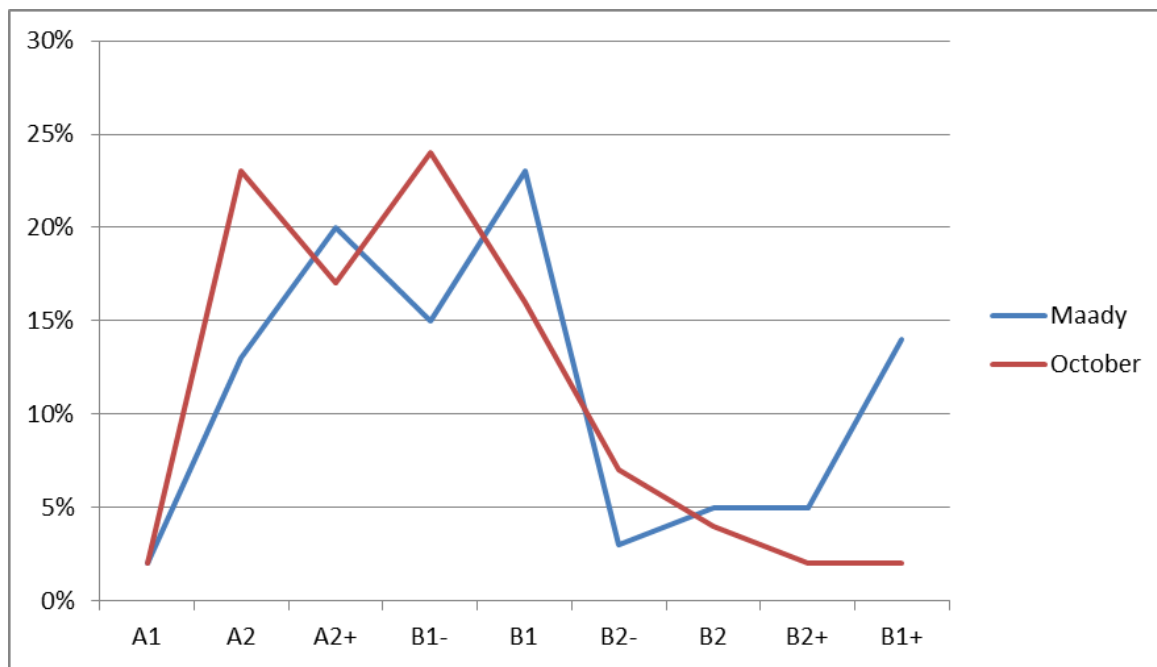
The above table (7) shows that **98% of students demonstrated improvement by a minimum of one band level during the semester**. The highest percentage of students in the Baseline scored between A2+ (39%) and A2 (20%). However, in the Exit exam, the majority of grade 10 girls scored between B1 (23%) and A2+ (20%). This comparison shows that students at Ma'ady school are improving in their English proficiency level hitting Intermediate level.

The following table (8) is a comparison for the total Baseline exam grades and the Exit exam at October school:

Range of Overall Proficiency Rate	Grading Letter, Number and Percentage (October School)	
	Baseline Exam	Exit Exam
0-2.75	A1 (14/9%)	A1 (3/2%)
3.0-3.25	A2- (67/43%)	A2- (1/1%)
3.5-3.75	A2 (10/6%)	A2 (33/23%)
4.0-4.25	A2+ (40/26%)	A2+ (24/17%)
4.5-4.75	B1- (10/6%)	B1- (34/24%)
5.0-5.25	B1 (12/8%)	B1 (23/16%)
5.5-5.75	B1+ (1/1%)	B1+ (3/2%)
6.0-6.25	B2- (1/1%)	B2- (10/7%)
6.5-6.75	B2 (0/0%)	B2 (5/4%)
7.0-7.25	B2+ (0/0%)	B2+ (5/2%)
7.5-7.75	C1- (0/0%)	C1- (0/0%)
8.0-8.25	C1 (0/0%)	C1 (0/0%)
8.5-8.75	C1+ (0/0%)	C1+(0/0%)
9	C2 (0/0%)	C2 (0/0%)

Table 8-Compares Between Baseline and Exit Grades –Ma’ady STEM School

The above table (8) shows that, like Al Maady, 98% of students demonstrated a proficiency level increase of at least one band during the semester. The highest percentage of students in the Baseline scored between A2- (43%) and A2+ (26%). However, in the Exit exam, the majority of grade 10 boys scored between A2 (23%) and B1- (24%). This comparison shows that students at October school are almost equally hitting the Pre-Intermediate and Intermediate levels. Also, around 18% of October students scored in the Exit exam the Academic level.

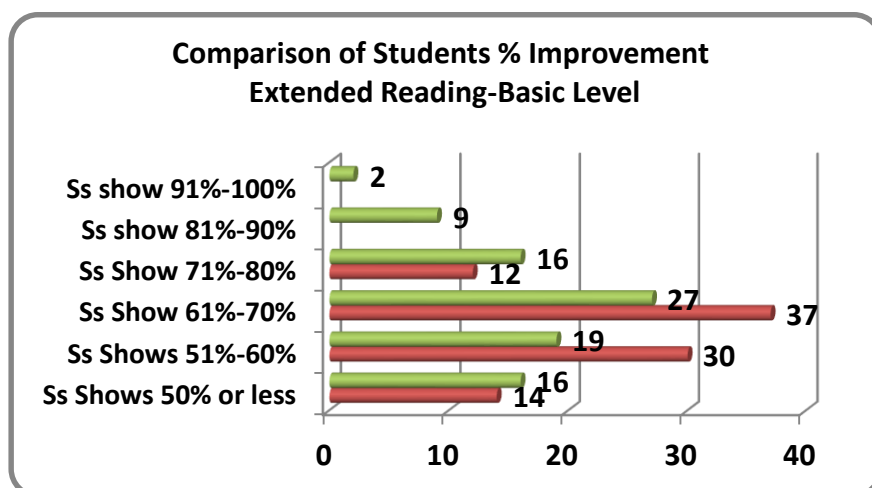


Graph Q- Compares Between the Exit Grades in Both Ma’ady and October Schools

The above graph (Q) indicates that the majority of students at Ma’ady school scored between the highest band of Pre-Intermediate A2+ (20%) and the highest band of Intermediate level B1 (23%), with lowest grade A2- (0%). However, the majority of students at October school scored the lowest band of Pre-Intermediate A2 (23%) and the lowest band of Intermediate B1- (24%). This analysis indicates that the percentages of the Exit exam scores of Ma’ady school-grade 10 are relatively the same as October; however, the scores achieved on the CEFR bands for Ma’ady school are higher in bands than those of October despite that they are within the same ELP levels.

d. Extensive Reading Classes

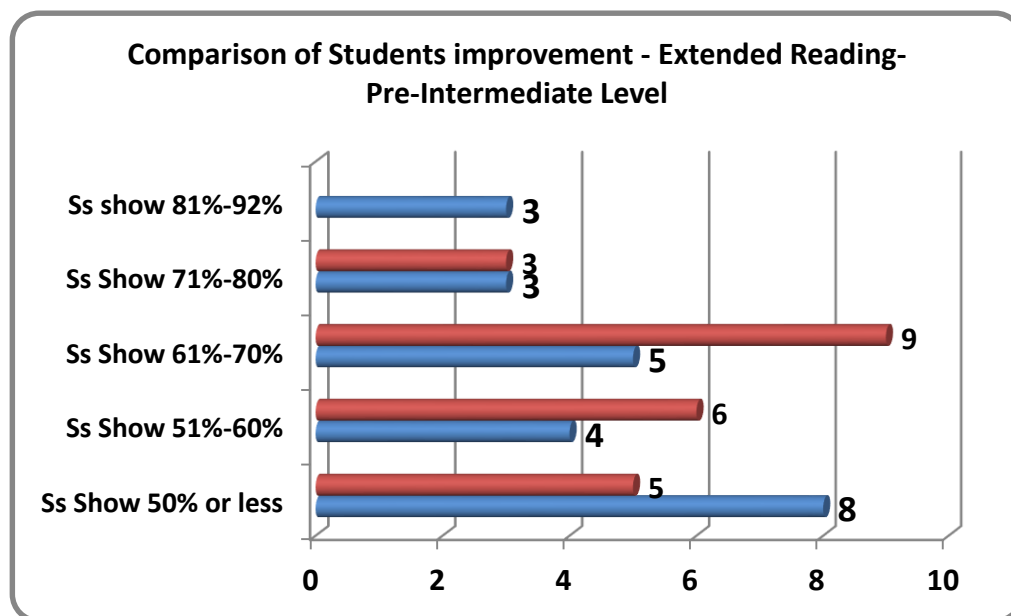
The following table and the graph follow compare between the percentages of improvement among students at Ma’ady and October schools for the Basic level:



English Level	Ranges of Improvement in the Extended Reading	Number of Ss at Ma'ady School	Number of Ss at October School
Basic	Ss Show improvement with 50% or less	14	16
	Ss Show improvement with 51%-60%	30	19
	Ss Show improvement with 61%-70%	37	27
	Ss Show improvement with 71%-80%	12	16
	Ss show improvement with 81%-90%	0	9
	Ss show improvement with 91%-100%	0	2
	Total Number of students in each school	96 Ss	90 Ss

The following table and the graph follow compare between the percentages of improvement among students at Ma'ady and October schools for the Pre-Intermediate level:

English Level	Ranges of Improvement in the Extended Reading	Number of Ss at Ma'ady School	Number of Ss at October School
Pre-Intermediate	Ss Show improvement with 50% or less	8	5
	Ss Show improvement with 51%-60%	4	6
	Ss Show improvement with 61%-70%	5	9
	Ss Show improvement with 71%-80%	3	3
	Ss show improvement with 81%-92%	3	0
	Total Number of students in each school	23 Ss	22Ss



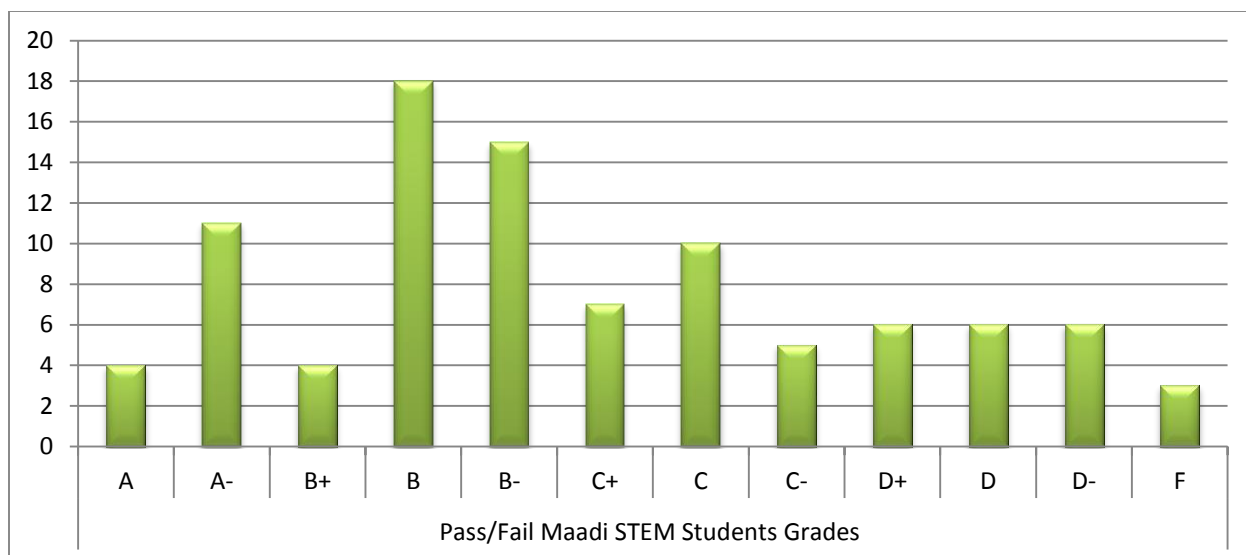
II. Grade 11

The total number of students in grade 11 who attended the **Conversation** level was 222; 95 students in Maady STEM School and 127 students in October STEM School. The number of passing students in both October and Maady is 194 students while the total number of the failing students is 28 students. The failing students are either of no or low attendance or of a score less than the passing score; 61%.

Ma'ady STEM School:

The following graph shows the Pass and Fail Students Grades in Ma'ady School; Total number of students is 95.

Pass/Fail Maadi STEM Students Grades											
A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
4	11	4	18	15	7	10	5	6	6	6	3



As shown above, most of the students, 43 out of 95, scored B, B-, and C.

Most of the Conversation Ma'ady STEM School students achieved an Independent intermediate and upper Intermediate level, demonstrating the following abilities::

- Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc.
- Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialization.
- Can deal with most situations likely to arise while traveling in an area where the language is spoken.
- Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party.
- Can produce simple connected text on topics that are familiar or of personal interest.
- Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
- Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.

The following table indicates the number of Ma'ady STEM students who failed due to low attendance; missing more than 4 sessions.

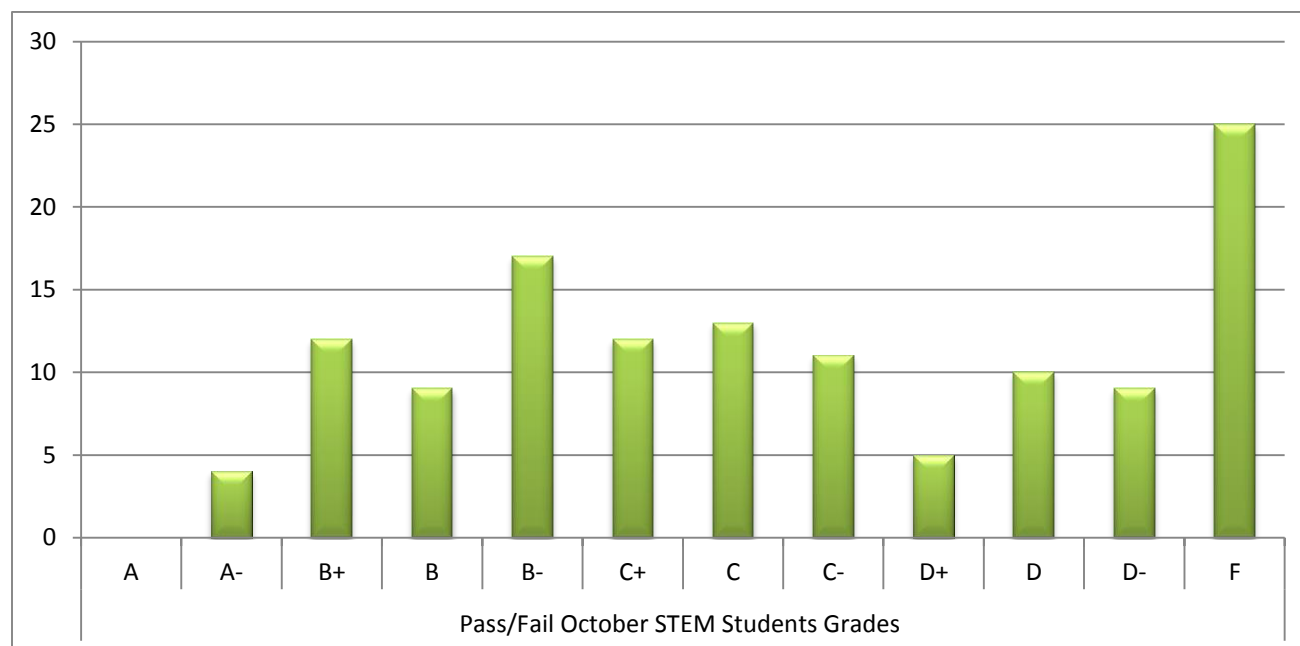
1	68%	8	77%
2	77%	9	64%
3	68%	10	73%
4	73%	11	77%
5	77%	12	77%
6	73%	13	77%
7	73%	14	68%
		15	68%

October STEM School:

The following graph shows the Pass and fails Students Grades in October School; Total number of students is 127.

Pass/Fail October STEM Students Grades

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
0	4	12	9	17	12	13	11	5	10	9	25



As shown above, 98% (125 of 127) students met the basic course objectives, demonstrating independent intermediate and upper-intermediate English language abilities: Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialization.

- Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party.
- Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
- Can understand a wide range of demanding, longer texts, and recognize implicit meaning.
- Can express ideas fluently and spontaneously without much obvious searching for expressions
- Can use language flexibly and effectively for social, academic and professional purposes
- Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices.

The following table indicates the number of October STEM students who failed due to low attendance; missing more than 4 sessions.

1	36%	16	36%	31	64%	46	68%	58	59%
2	14%	17	50%	32	73%	47	68%	59	68%
3	77%	18	73%	33	73%	48	41%	60	59%
4	59%	19	55%	34	68%	49	41%	61	64%
5	27%	20	55%	35	55%	50	45%	62	73%
6	77%	21	14%	36	68%	51	45%	63	73%
7	9%	22	45%	37	73%	52	73%	64	55%
8	50%	23	77%	38	73%	53	77%	65	45%
9	18%	24	73%	39	64%	54	55%	66	23%
10	55%	25	5%	40	77%	55	73%	67	73%
11	59%	26	64%	41	32%	56	45%	68	0%
12	41%	27	64%	42	73%	57	77%		
13	50%	28	77%	43	68%				
14	32%	29	36%	44	77%				
15	50%	30	64%	45	77%				

The students Pass / Fail grades for both STEM schools have been e-mailed to the students individually by their ELP teachers. Additionally, the Final Grade Sheet shall be e-mailed to the two school principals as well in order to motivate the students not to miss ELP classes and sessions.

6. e-STEM Online

a. Procedures

Although ELP results have been positive in the past 2 years, the cost of the program renders it unsustainable given that the MOE will be unable to absorb the costs after the life of the project. ECASE proposed replacing the after-school face-to-face program with an online learning system for STEM school students. World Learning developed e-STEM online, a web-based program that provides interactive English language activities that help the STEM students better access STEM content delivered in English. It provides a variety of customized language learning activities, and also provides students with plenty of English language input. e-STEM Online aims at linking the online work students do to project-based classroom activities apart from the school's core English language program.

The procedures included the following:

1. Identifying online software that is basically an interactive STEM language learning experience to integrate core STEM content. This content aims at addressing STEM school student needs. The online software is a free system that provides interactive practice with the language.
2. Training core teachers at the STEM schools on the software, ensuring effective use during the pilot phase.
3. Creating access Log In Names and Passwords for the students.
4. Piloting the software with students during the first semester during the 2014-15 academic year. Students completed online tasks, and gave regular feedback to teachers/project staff.

b. Students Evaluation

To collect feedback on the pilot of e-STEM online, a Student Evaluation record was created and shared among the STEM students, Grade 10 and 11. Students used the evaluation record to list their suggestions on how to enhance the current program to better cater to their needs. The following is a summary of evaluation results.

I. Grade 10

The total number of students who completed the evaluation at both October and Ma'ady schools is 240 out of 255 students. The reason behind having not all students conducting the E-STEM evaluation was that the absent rate was quite high in classes in this session due to students' busy schedule with Capstone and school subjects.

Different closed ended questions with four options were shared with the students throughout the first part of the evaluation (See table 20). The first part evaluates the online E-STEM content, topics, structure and organization. The options were ranging from "Strongly Agree", "Agree", "Disagree",

“Strongly Disagree” and “I Don’t Know”. As for the second part of the evaluation, it evaluates the students use frequency for E-STEM, number of units covered and schools teacher frequency of monitoring and following up with students’ production and work (See table 21). Also, students shared some qualitative and descriptive comments on the course material which were used to validate the results reached from the analysis.

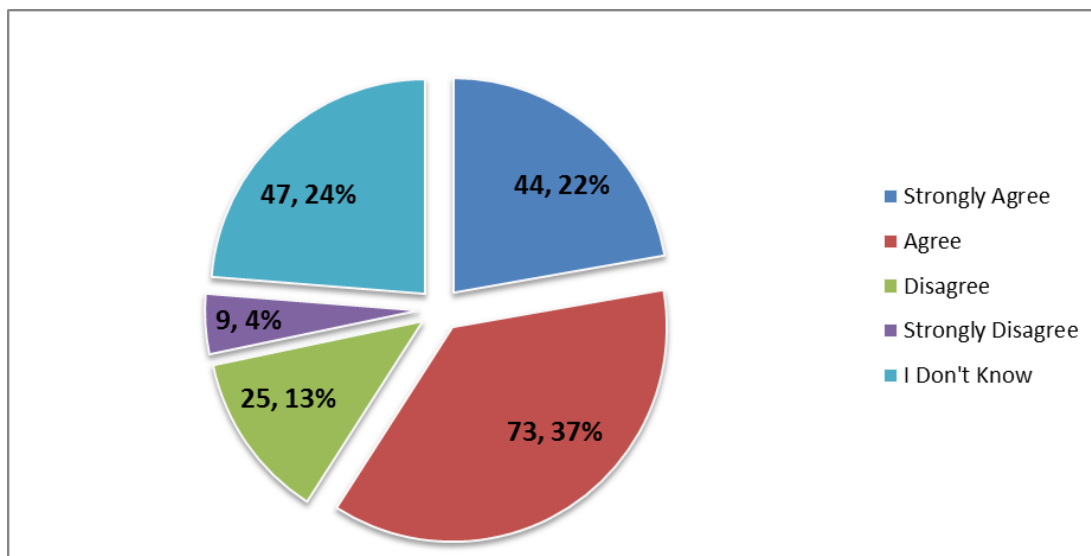
Table (20) and graph (V) illustrate the impact of Online E-STEM on Grade 10 students’ Progression and Proficiency Level in English, and future use.

Online E-STEM Content, Organization & Structure	Options				
	Strongly Agree	Agree	Disagree	Strongly Disagree	I Don’t Know
The E-STEM topics are related to my STEM school subjects.	23 (11%)	118 (58%)	38 (19%)	10 (5%)	13 (7%)
The E-STEM warm up activities help me identifying the topics of the units.	44 (22%)	100 (50%)	37 (18%)	5 (2%)	16 (8%)
The E-STEM listening activities help me improving my listening skill.	62 (35%)	79 (45%)	2 (1%)	14 (8%)	20 (11%)
The E-STEM reading activities help me improving my reading skill for my STEM subjects.	36 (18%)	94 (47%)	37 (18%)	9 (5%)	24 (12%)
The E-STEM speaking activities help me improving my communication skill in English.	24 (12%)	89 (45%)	39 (20%)	24 (12%)	21 (11%)
The E-STEM writing activities help me accomplishing my STEM subjects writing assignments.	22 (11%)	97 (49%)	43 (22%)	12 (6%)	25 (12%)
The E-STEM helps me understanding my strong and weak language areas in English.	46 (24%)	71 (36%)	41 (21%)	13 (7%)	24 (12%)
In the future, I will continue using the E-STEM independently to improve my English language skills.	44 (22%)	73 (37%)	25 (13%)	9 (4%)	47 (24%)

Table V- Number and Percentage of Grade 10 Students choices for Grade 10 Online E-STEM Evaluation- Part 1 (Online E-STEM Content, Organization & Structure)

An analysis of table (20) and graph (V) shows that the majority of Grade 10 students “Agree” with all of the statements presented in part 1 of the evaluation with a percentage ranging from 36% to 58%. This indicated that the majority of Grade 10 students agree that the E-STEM topics are related to their school subjects. Also, the majority of students agree that the E-STEM content, including warm ups, listening,

reading speaking and writing have helped them to improve in different English language areas. In addition, it has enabled them to identify their weak and strong areas in English language areas. It is worth mentioning that we have high percentage for the option “I Don’t Know” ranging from 13% to 47%. This is due to that some of the students have tried the E-STEM once, or they never accessed it.



Graph V- Illustrates Grade 10 Students Future Use for the E-STEM independently to improve their English Language Skills

Table (21) shows the students use frequency for E-STEM. Tables (22) and (23) show the number of units covered by the students and the frequent teachers’ following up and monitoring students’ work:

	Options				
Online E-STEM Students Frequency Use	5 hrs.	3 hrs.	2 hrs.	1 hr.	Never
How Often do you use the E-STEM per week?	6 (3%)	29 (14%)	37 (18%)	59 (29%)	29 (14%)

Table 21- (Part 2 of the Evaluation)

	Options				
Online E-STEM Number of Units covered during the Semester	All	Most	Some	Few	None
How many units have you covered on E-STEM this semester?	3 (1%)	17 (8%)	42 (21%)	66 (33%)	30 (15%)

Table 22- (Part 2 of the Evaluation)

	Options
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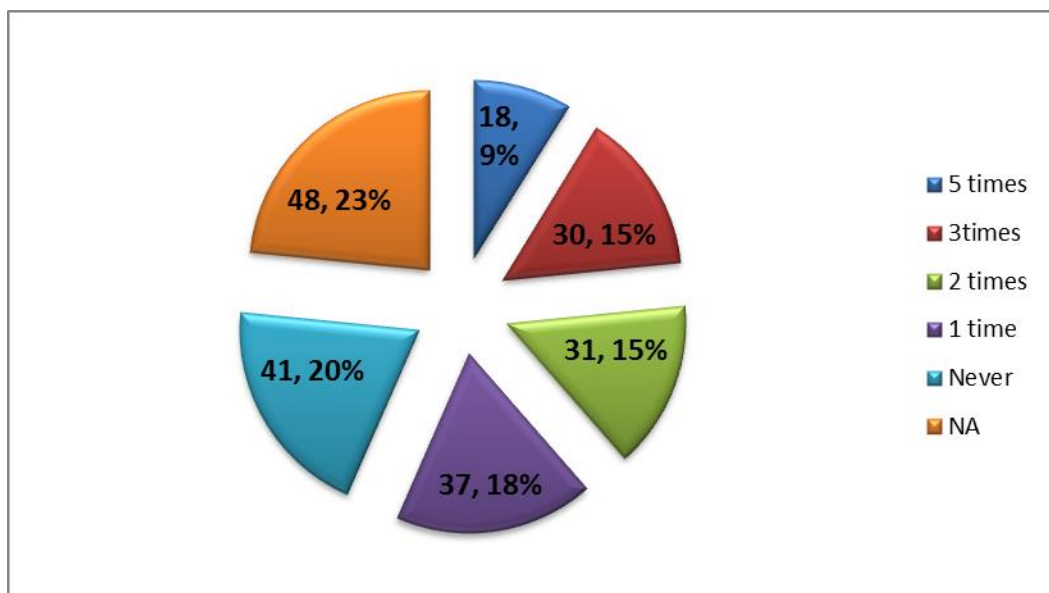
Online E-STEM Teachers' Follow up and Monitoring	5 times, or more	3 times	2 times	1 time	Never
My teacher followed up with me my progress.	18 (9%)	30 (15%)	31 (15%)	37 (18%)	41 (20%)

Table 23- (Part 2 of the Evaluation)

An analysis for table (21) shows that the majority of Grade 10 students at both October and Maady schools have used the online E-STEM 1 hour only per week. The less number of accessing hours per week can be a result of different factors which include the busy schedule of the English STEM schools teacher with the school and Ministry English curriculum which has resulted to the fact of lack of time to cover it in class. Additionally, students completed online work while also taking an additional 4h of face-to-face after school classes. Another factor can be the shortage of time between students receiving their accessing information to the E-STEM and end of the semester. One more factor can be that some students are not familiar with the idea of working independently, depending mainly on their teachers at schools. Table (22) shows that the majority of Grade 10 students at both schools have covered "Few" parts of level 1 units on E-STEM during this semester. This can be also referred to the shortage of time or lack of ways to orient and encourage students to access E-STEM independently.

Table (23) and graph (W) show that the majority of Grade 10 students have never received feedback or follow up (20%) from their English school teachers on their work produced on E-STEM or and their progression. This indicates that English school teachers need to set an effective plan as part of their Curriculum and teaching strategies to use various strategies for giving feedback and monitor Grade 10 students' E-STEM progression and work production, especially speaking and writing. The result of this statement here is significantly related and interprets the low percentage of students' future use for E-STEM.

It is also worth mentioning that 22% of students did not give any answer for this question. This can be attributed to the reason that they never accessed it or received enough encouragement by the teachers to try it.



Graph W- Illustrates Number of Times of Teachers Following up with Grade 10 Students' E-STEM work Production

-Recommendations for Improving the Online E-STEM

The above mentioned quantitative data was supported by considerable comments Grade 10 students shared in both schools showing their opinion about the Online E-STEM Program. The following is a summary for the students' comments at Ma'ady and October schools (Table 24):

Areas of Strength – Key Themes	Areas that need improvement
<ol style="list-style-type: none"> 1) We love clarity-STEM. Give us more. 2) We want to continue E-STEM. 3) E-STEM online is beneficial - it helps us improve our English skills and understand my STEM subject lessons. 4) E-stem is important to us. 	<ol style="list-style-type: none"> 1) Teachers need to introduce is to e-STEM online more. 2) We need more time with e-STEM/use it more regularly. 3) Some activities are not good enough to know our weaknesses and improve our skills. 4) Listening exercises need to be more interactive to have a better effect. 5) The way it corrects things is not good. It should be more accurate in evaluating and correcting us. 6) We will be better in speaking if Clarity/E-STEM includes more interesting practices and online speaking activities. Also, we want our speaking to be evaluated at once. 7) We need a vocabulary list of the most important words on Clarity/E-STEM. 8) The writing and speaking activities should be better than the one we study. 9) There are some kinds of errors in the website. When you sometimes write an answer the page corrects it automatically. We suggest that there must be a button to click that corrects my answer 10) Why do not you make a guide that helps using it like a video or a presentation? 11) Content needs to be more interested/connected to our STEM subjects.

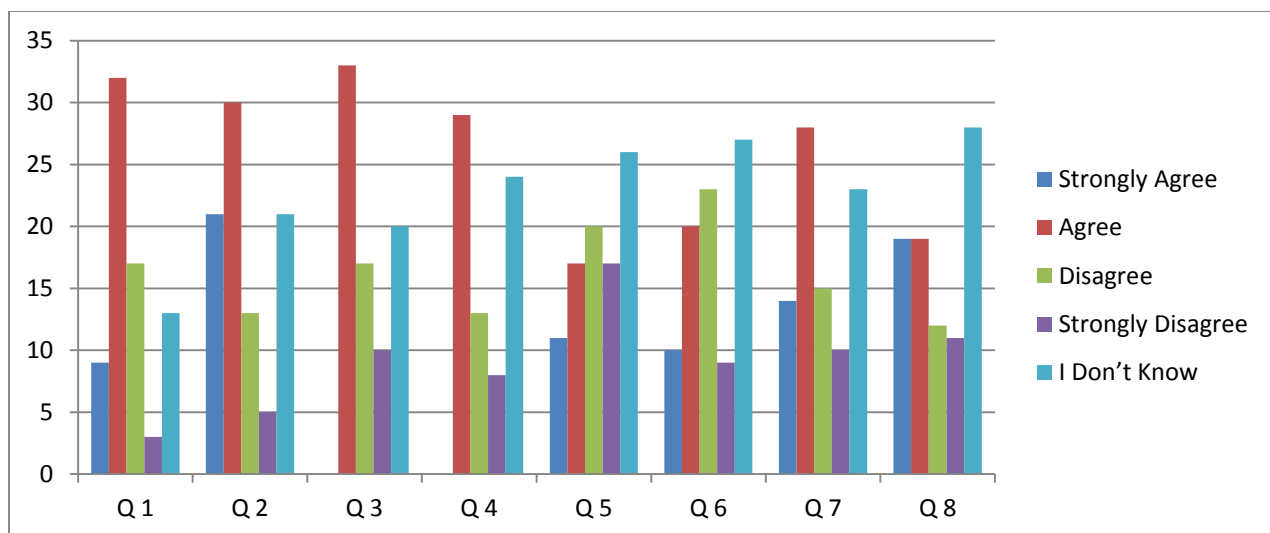
Table 24- A Qualitative Summary for the Grade 10 Students' Comments on the Online E-STEM use, content, organization and School teachers' feedback for Improvement- Maady & October Schools

The qualitative comments made by Grade 10 students on the use of E-STEM shows that the majority of students perceive that E-STEM is useful and beneficial for them. However, there are some suggestions to consider for Improvement. The following summarizes the areas that will be improved in time for the 2015-16 school year:

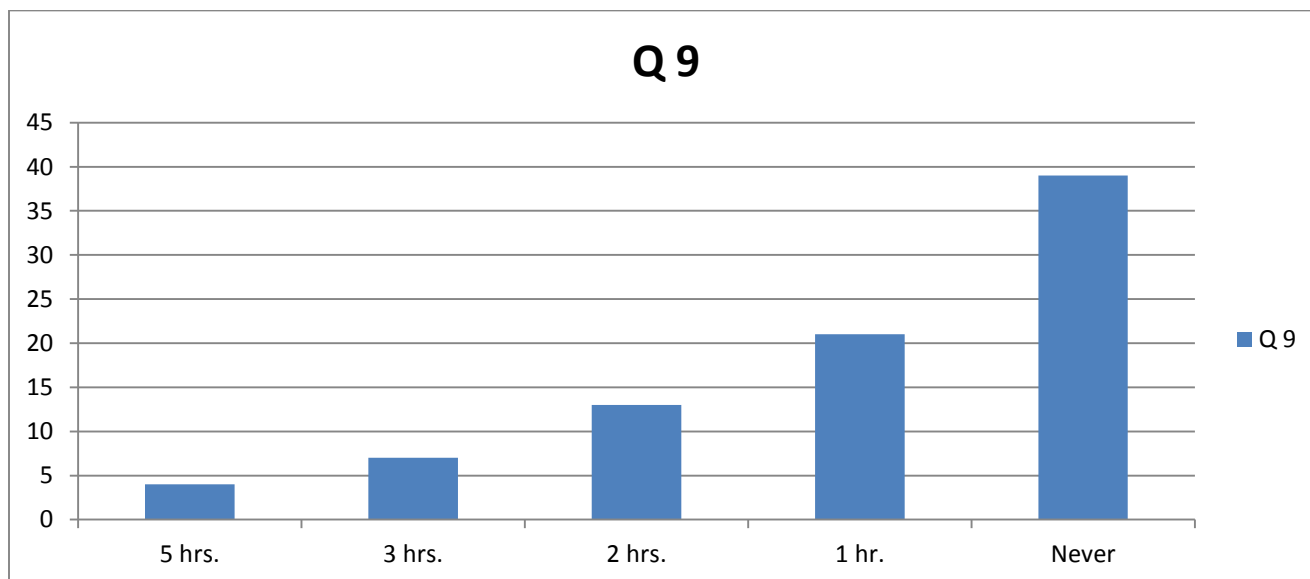
- School teachers should dedicate more time for orienting students to the E-STEM. This can be through integrating it into the school English curriculum or through dedicating extra session for it. We will also provide teachers with training on effective and motivating ways to monitor student progress.
- The E-STEM website should be more interactive, attractive and user friendly.
- More STEM vocabulary and topics should be part of the E-STEM in an interactive way, especially with Level 1.
- More feedback techniques should be used by teachers to give immediate and online writing and speaking feedback on students' E-STEM work production.
- Develop a training manual/video for students which they can refer to anytime to show them how to use E-STEM.

II. Grade 11

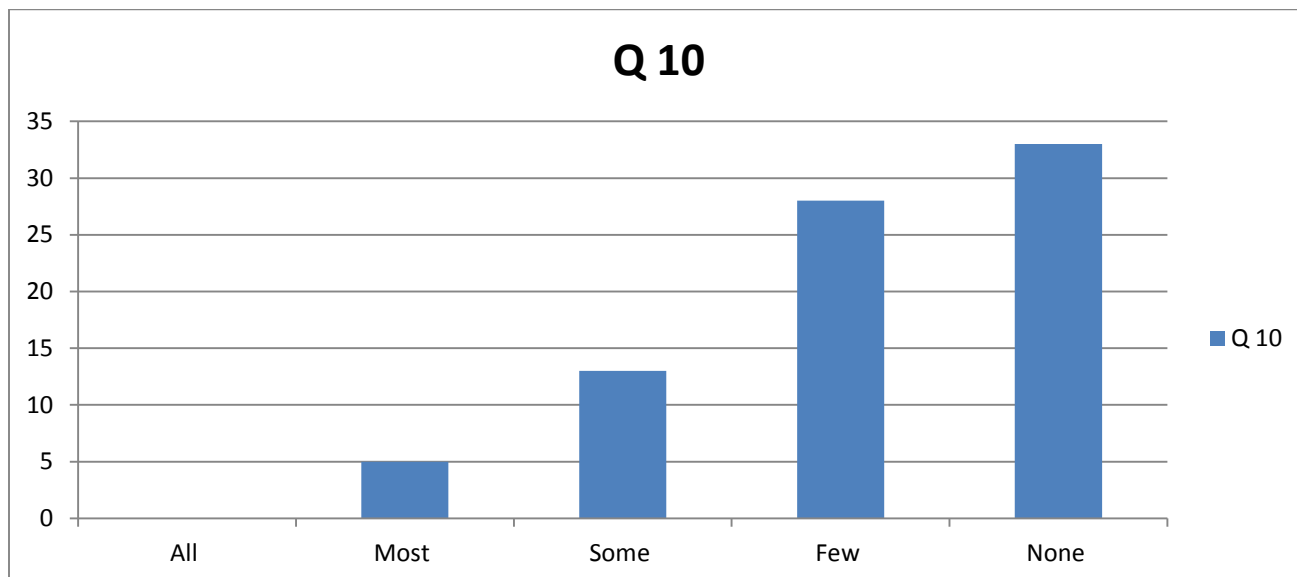
#	Evaluation Item
1	The e-STEM topics are related to my STEM school subjects.
2	The e-STEM warm up activities help me identifying the topics of the units.
3	The e-STEM listening activities helped improving my listening skill.
4	The e-STEM reading activities help improving my reading skill for my STEM subjects.
5	The e-STEM speaking activities helped improving my communication skill in English.
6	The e-STEM writing activities help me accomplishing my STEM subjects writing assignments.
7	The E-STEM helps me understanding my strong and weak language areas in English.
8	In the future, I will continue using the e-STEM independently to improve my English language skills.



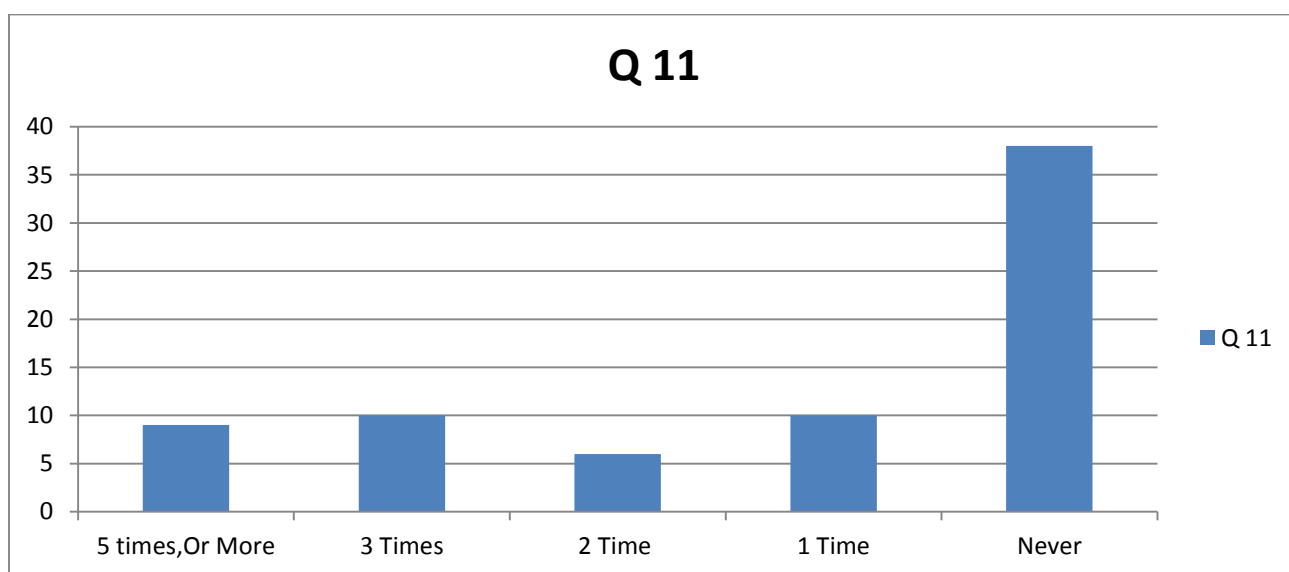
#	Evaluation Item
9	How often do you use the e-STEM per week?



#	Evaluation Item
10	How many units have you covered on e-STEM this semester?



#	Evaluation Item
11	My teacher followed up with me my progress.



As per the collected evaluation data as listed in the graphs above, most of the STEM students are in the process of experimenting the new software. Additionally, the STEM schools teachers did not dedicate the appropriate time to follow up with the students' progress.

The ELP director held a meeting with The MOE Councilor, Mr. Rashad Ramadan and the STEM English teachers who were engaged in a long detailed discussion that aimed at concluding the appropriate time the English teachers should dedicate to integrate the e-STEM into the regular English classes. The discussion concluded to experiment the appropriate time for the e-STEM English Ts. along the current semester to decide for the upcoming semesters accordingly. As a suggestion to the upcoming anticipated e-STEM content/ components changes, Mr. Rashad suggested integrating 2 more items; both STEM relevant topics and none STEM topics. This counts as a quite valid idea in order to motivate the STEM students, both those only keen for their STEM academic progress and those keen for improving their general English skills as well. Eventually, all students will log in to the program more frequently and get more exposed to both STEM relevant and none STEM relevant materials.

These first-semester pilot findings provide the project/schools with critical feedback that can be incorporated into revisions for the 2015-16 academic year. Core changes will include:

- Training for teachers so that they can orient students to the program, and effectively monitor progress.
- Create online videos/manual to guide students on use.
- Improve the user-interface to make the program more engaging/easy to follow.
- Repair technical glitches, where needed.
- Incorporate more STEM-subject specific content (we will use literacy sections from core STEM subjects to better align content to student needs)

7. ELP Teachers to Students Evaluation Reports

ELP Grade 10 and 11 Teachers were requested to write and share Evaluation reports with their students. The reports listed areas of strength and points weakness of each student. Additionally, the recommended action plan for each student to work on in order to improve his/her listening, speaking, reading, and writing skills.

I. Grade 10

Teachers in both schools wrote two Progression Reports on students' performance as follows:

-Mid-Term Progression Report: This was prepared by the teachers during week 5 after conducting the Mid-term exam. This was discussed with the students during the individual conferencing that was done with the students during week 6.

-Final-Term Progression Report: This was prepared by the teachers after conducting the final/Exit exam during. The purpose of the Final Progression Report results from the editing the Mid-Term Progression Report and changing or adding the weak language areas or the areas of

strength for each student. The Final report should be shared by teachers with the students directly via e-mail.

The Mid- and the Final-Term Progression Reports work mainly on writing a brief and simple comments on students positive and negative language areas and performance. Teachers also write a suggested action plan for students to follow to improve their language weaknesses. The following tables (11 and 12) summarize the teachers' comments on students' performance and action plans in both schools:

Ma'ady	
Teachers' Comments on Students' Performance	Teachers' Suggested Action Plan
1) Showing progress in writing: sentence form and punctuation.	1)Presentation skills: very shy, doesn't maintain eye contact
2) Showing progress in Reading and comprehension and Listening	2)Pronunciation and fluency. Listening and summarize
3) Showing better speaking and presentation skills.	3)Inconsistent usage of simple tenses.
4) Showing progress in the Listening for main ideas.	4)Listening for details.
5) Showing progress in Paragraph writing and the use of Simple tenses.	5)doesn't participate in class
6) The student is a very good student. She is good at listening for main ideas but she needs improvement at listening for details. She is good at reading and writing but needs more practice at speaking	6)Pronunciation. Inconsistent present simple and present perfect tenses
7) The student can speak and write correctly. She might face some difficulty when she listens to a long passage or conversation but this is still a minor problem. She's an excellent presenter and she's expected to be a very professional caliber.	7)Punctuation: comma.
8) Unlike my report about her during summer camp, the student showed less interest in the course. She worked well but not as expected. She has problems with pronunciation and sentence structure.	8) A good idea is to focus on and highlight the details while reading. A good idea to improve her speaking is to speak with her roommates in English most of the time. They can explain other subjects to each other in English.
9) The student worked a lot on her sentence accuracy and she progressed a lot. She still has a problem with pronunciation because she doesn't even try to avoid the common mistakes.	9) As for writing, a good idea is to write drafts
10) The student progressed a lot. She became a more self- confident person. She can speak spontaneously although she might have some mistakes but they are manageable. She works on writing and listening a lot and she progressed in them	10) The student needs to focus on speaking. She might need a special training in phonics.

Table 11 - Illustrates the Major Teachers' Comments on Students' Performance with the Action Plan for Basic and Pre-intermediate- Ma'ady School

October	
Teachers' Comments on Students' Performance	Teachers' Suggested Action Plan
1) The student is good at guessing the meaning of vocabulary. He is not good at listening for the main idea and he needs improvement in listening for details this is illustrated in the final test. He is good at writing paragraphs but he needs to work on punctuation marks and structure. His speaking test was not good as he was hardly heard and couldn't answer some of the questions asked. The presentation skills are poor as he doesn't show enough self-confidence and very quiet.	1) The student needs to work on articles using a grammar book to know how to use articles appropriately. He needs to use a grammar book to check tenses. He needs to work on improving his listening skills for details by taking notes and summarizing the listening details. As for reading, he needs to read more and try to use his own words to express the ideas read. He needs to practice speaking and records himself. (Clarity should be used for improvement) .
2) The student is ok at listening for the main idea and details. As for writing He produces a variety of sentences with occasional errors in structure that obscure meaning in a limited way. As for vocabulary, the student is very good at guessing the meaning of the new words. He is good at writing at paragraphs but when it comes to pronouns, punctuation marks and prepositions he needs to work on them appropriately	2) The student needs to refer to a grammar book for revising pronouns, punctuation marks and prepositions to better writing .(practical English Usage) can be used for better performance .The student is requested to write a paragraph related to the topic stated as ideas have to be strictly applied.
3) The student is not good at listening for the man idea or listening for details. As for reading, he shows improvement in getting the main ideas and specific details .He is very good at reading comprehension. Concerning vocabulary, he is excellent at guessing the meaning of the new words. He has a problem in speaking as more self-confidence is required. Sometimes he encounters difficulty in getting the message easily.	3) The student can perform better in listening by listening to more Podcast, TV or the TED talks. It is advisable that Mohamed reads more in order to enhance finding the minute details and avoid thinking in Arabic. Mohamed needs to refer to a grammar book learn more about structure of appropriate sentences for a better performance in writing. (Practical English Usage) can be used for better performance.
4) The student is good at listening for the man idea and listening for details. As for reading, he is not able to find specific details in the reading comprehension. Concerning vocabulary, he is excellent at guessing the meaning of the new words. When it comes to writing, the student is able to use a variety of simple, compound and complex sentences. He has a problem as he thinks in Arabic so some of the ideas are not well	4) The student needs to practice reading more. He needs to be exposed to a variety of reading comprehension paying due attention taking notes of any new word he encounters and refers to the dictionary later on with the aim of increasing his wardrobe. Mohamed needs to refer a dictionary for spelling and he needs to stick to the ideas required.

drafted.	
<p>5) -Listening: The student needs improvement in listening for main ideas and for details.</p> <p>-Reading: Good at reading for main details but needs improvement in reading for details.</p> <p>-Speaking: Good at vocabulary choice but often tends to translate into Arabic. He also needs to work on using the right part of speech. He does averagely well at fluency-based activities but needs to work on his pronunciation.</p> <p>-Presentation skills: His final presentation was well-supported and smoothly-presented but he needs to work on using the correct stress and intonation patterns.</p> <p>-Writing: Good at writing paragraphs when it comes to punctuation and sentence structure but needs to work on the paragraph structure (supporting details & examples) and word choice.</p> <p>Comment* He showed commitment to the action plan discussed during the mid-term individual conferencing.</p>	<p>5)The student needs to work on improving his listening skills for main ideas by practicing listening to different kinds of materials and writing a one-sentence summery of the main idea for each one(keeping a listening log is suggested too) and for details by taking notes and summarizing the listening details.</p> <p>He needs to practice scanning the reading texts, taking notes and summarizing the details. The student Needs to study the parts of speech of each word, write examples for each one and practice doing many vocabulary exercises. He needs to strengthen his writing skills through doing writing exercises.</p>
<p>6) - Listening: The student is excellent at listening for details and for main ideas.</p> <p>- Reading: Good at reading for main ideas but needs improvement in reading for details.</p> <p>- Speaking: He is excellent at fluency- based activities, good at vocabulary choice but needs to work on using the right part of speech.</p> <p>- Presentation skills: His final presentation reflected an improvement when it comes to his confidence, body language and eye contact. He needs to work on using the correct stress and intonation patterns.</p> <p>- Writing: Good at writing paragraphs when it comes to paragraph structure, vocabulary and punctuation but needs to work on using compound and complex sentence structures.</p> <p>Comment* He showed commitment to the action</p>	<p>6) The student needs to work on improving his listening skills for main ideas by practicing listening to different kinds of materials and writing a one-sentence summery of the main idea for each one(keeping a listening log is suggested too).</p>

plan discussed during the mid-term individual conferencing.	
7) The student is very good in listening, grammar and is moderately good in written English. He needs to improve his pronunciation and spoken English structure. He mixes English and Arabic structures sometimes while speaking. He is confident, however, which is a plus point.	7) He needs more speaking practice. He also needs to listen to spoken English a lot to get acquainted with the right pronunciation of some words/letters.
8) The student is good in listening. He needs to be more confident in his spoken English. And he also needs to work on his writing a little. He needs to FOCUS in class. He is usually absentminded and inattentive	8) He needs to listen to formal English more. Perhaps he can be introduced to various news podcasts and newspaper articles written in formal language. He needs to practice conversation and speaking more to gain the confidence.
9) The student is good in reading and understanding main ideas. He needs more work on his sentence structure, listening and speaking.	9) More intensive listening and speaking activities. More writing and feedback for the sentence structure formation.
10) The student is good in reading, listening and partially writing.	10) Writing and feedback to fix the grammar and structure problem. More spoken English to give him confidence and to make him practice the right English pronunciation.

Table 12- Illustrates the Major Teachers' Comments on Students' Performance with the Action Plan for Basic and Pre-intermediate- October School

II. Grade 11

The students Evaluation Record Format used with grade 11 students has been edited in order to cater the students' needs and provide them with concrete feedback and action plans. The records covered areas of strength, weakness, action plans, and suggested supplementary materials.

As per the ELP Teachers to Students Evaluation Reports, many students can understand sentences and frequently used expressions related to areas of most immediate relevance. Some others can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Finally, another group of the students can describe in simple terms aspects of their background, immediate environment and matters in areas of immediate need. A recommended action plan was provided for each student to work on in order to improve his/her listening, speaking, reading, and writing skills.

The table below lists some of the most common Teachers' feedback the STEM students:

Areas Of Strength	Areas Of Weakness	Action Plan + Recommended Support Resources

<ul style="list-style-type: none"> - Fluent - Very good vocabulary - good organization of ideas in writing & presentations - Good development of ideas - Interactive - Very good pronunciation 	<p>Speaking & Pronunciation:</p> <ul style="list-style-type: none"> - Vowel sounds (ex. Mock) - p/b (public) - g (gestures) - intonation <p>Writing & Grammar:</p> <ul style="list-style-type: none"> • Organization • Topic sent (topic + controlling idea) • Every paragraph should have one main idea (controlling idea) • Conclusion (no new ideas) • Thesis statement • Comma Splice • Articles <p>Sentence Structure</p>	<p>American English Pronunciation http://www.rachelsenglish.com/video-category/pronunciation Intonation & Stress http://www.rachelsenglish.com/video-category/intonation-stress</p> <p>General Writing Tips https://owl.english.purdue.edu/owl/section/1/ http://www.grammarly.com/handbook/search/?q=Essay</p> <p>Pronunciation videos & lessons http://www.bbc.co.uk/worldservice/learnenglish/grammar/pron/sounds/vowel_short_1.shtml</p> <p>American English Pronunciation http://www.rachelsenglish.com/video-category/pronunciation Intonation & Stress http://www.rachelsenglish.com/video-category/intonation-stress</p>
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The students received the Teachers' oral input after the final presentation as well as the final debate. Additionally, the students were e-mailed the concrete listed individual input by the end of the program; Dec. 15th.

8. ELP Teachers Classes Observations

Class observations and class visits were conducted during the whole semester for all the teachers teaching English in the evening English Language classes. Class observations are essential for the Program in order to enhance and enable quality control, support teacher development including up-to-date teaching methodologies, boost teacher development in relation to student learning process. The Class Observation manual was used by the teachers and the observers to follow in order to maintain effective results at the end. The Observation Manual has teacher's pre-observation sheet, the observation criteria and the teacher's post-observation sheet as part of the observation criteria.

I. Grade 10

- Teachers First Observation and Evaluation

Class observations and class visits were conducted during the whole academic semester (2014-2015) for grade 10 teachers teaching ELP afternoon Basic and Pre-Intermediate levels at both October and Ma'ady schools. Class observations and visits are essential for the Program for the following reasons: enhance and enable quality control, support teacher development including up-to-date teaching methodologies, boost teacher development in relation to student learning process. Class Observation Manual has been designed for the teachers and the observers to follow in order to maintain effective results at the end. The Observation Manual has teacher's pre-observation sheet, the observation criteria and the teacher's post-observation sheet as part of the observation criteria.

The first class observation was conducted in weeks 3 and 4 of the academic semester. Week 3 was dedicated for observing October school teachers and week 4 for observing Ma'ady school teachers. Teachers were notified with the observation one week ahead to prepare themselves for the observation and to share with the Program their lesson plan early enough. Teachers were oriented to the Class observation Manual during the orientation session at the beginning of the semester. For more details about the Class Observation Manual, see Appendix E.

An Observation Tracking sheet was also designed to record the observer's comments concerning what went well in the class and what the teacher should work on improving. For more information about the teachers' first observation, see Appendix F.

The first teachers' evaluation was conducted also at the same time of the course evaluation and the first class observation. The aim of the teachers' evaluation is to give a chance for the students in both schools to evaluate their teachers' performance and add comments that would help teachers addressing students' language needs and interests in the second half of the semester. The teachers' evaluation evaluates the following as part of the teachers' performance:

- Teachers help students evaluate their progression
- Teachers give regular feedback
- Teachers make sure that students understand the class content
- Teachers give clear instructions for class activities and tasks
- Teachers speaks English in class
- Teachers encourages all students to work in pairs and groups
- Teachers help students improve their weak areas independently
- Teachers use technology in class
- Teachers can manage time effectively in class
- Teachers create safe environment for students to work in teams and enthusiastically
- Teachers respect students' different cultures and special needs

Results of the first teachers' evaluation are illustrated in table (9) below:

School	Level	Average Grade/5	Areas for Improvement
	Basic	3.9-4.5 (Satisfactory,	Giving regular feedback

October		Good & Very good)	and helping students to work independently on their weak language areas.
	Pre-Intermediate	4.0 (Good)	Using technology and giving regular feedback.
Ma'ady	Basic	4.1-4.6 (Good & Very good)	Giving regular feedback and helping students to work independently on their weak language areas
	Pre-Intermediate	4.6 (Very good)	Giving regular feedback and helping students to work independently on their weak language areas

Table 9- First Teachers' Evaluation Results with Scores out of 5 at Ma'ady and October STEM Schools

- Teachers Second Observation and Evaluation

The second class observation was conducted in weeks 7 and 8. Week 7 was dedicated for observing October school teachers and week 8 for observing Ma'ady school teachers. The same Class Observation Manual and Observation Tracking Sheet that were used in the first class observation were used in the second one. For more information about the second class observation in both schools, see Appendix F.

Results of the second teachers' evaluation are illustrated in the table (10) below:

School	Level	Average Grade/5	Areas for Improvement
October	Basic	4.1-4.6 (Good & Very Good)	Giving regular feedback.
	Pre-Intermediate	4.2 (Good)	Helping students to work independently improving their weak language areas and can manage class time well.
Ma'ady	Basic	3.7-4.7 (Satisfactory, Good & Very good)	Giving regular feedback and helping students to work independently improving their weak language areas.
	Pre-Intermediate	4.3-4.9 (Good & Excellent)	Helping students to work independently

			improving their weak language areas
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Table 10- First Teachers' Evaluation Results with Scores out of 5 at Ma'ady and October STEM Schools

It is worth mentioning that the teachers' performance in the second half of the semester significantly improved. This was clear in the teachers' evaluation results at Ma'ady school, where 3 teachers achieved "Very Good" ranging from 4.5-4.7 and "Excellent" for the Pre-Intermediate with an average 4.9. Whereas in the first teachers' evaluation, only two teachers achieved "Very Good" with an average 4.5 and 4.6. Ongoing professional development of teachers, namely observation and constructive feedback on teaching, has a direct impact on improved teacher performance.

As for October school, three teachers achieved "Very Good" with an average 4.6, whereas in the first teachers' evaluation, only one teacher achieved "Very Good" with an average 4.5.

The above mentioned tables also indicate that teachers need to work on using different feedback strategies to use with the students and help students more in improving their language weak areas independently by providing them with activities that can be online and interactive ones.

9. Professional Development

It was noticeable during classroom observations and students' course evaluation that teachers significantly need to know and practice more about running more interactive and communicative pronunciation techniques during the ELP classes. This was recommended majorly by the teachers as a result of their evaluations of the students' presentations or any speaking activity. Thus, it was suggested by the active ELP team to run a workshop that shares some useful and effective techniques and strategies for teaching pronunciation. This initiative was taken and offered also by one of the interactive members of Grade 10 team members; her name is Ms. Eman Samir. The workshop title was: "Enhancing Techniques For Teaching Pronunciation". The presenter, Ms. Eman Samir I am a six year experienced educator. She is certified in teaching both English and Arabic as foreign languages, a certified business and soft skills trainer masters holder of international education& School management. She has started the ILI choir for foreigners in an initiative I called "Learning language through art". She has been more than honored to work with USAID and world learning in teaching English to STEM high school students and it was like a dream come true. She is now acting as an educational consultant with a number of NGOs and institutions working in the field of children and teenagers' development. She adapts a communicative, inquiry based teaching pedagogy. For Ms. Eman, teaching is a life calling. Her classes are recognized as interactive and communicative ones. She excels in motivating students learning through fun.

It has been observed that students often succeed in showing considerable improvement in the four English language skills. Although the students generally respond well to the improvement plans devised

by the ELP; some of them still struggle with pronunciation. Faulty pronunciation has a very negative effect on speaking; listening and presentation skills. Due to that, this workshop aimed at exploring different reasons for this problem, and suggesting instructional activities to help teachers and students deal with pronunciation problems. Ms. Eman introduced various interactive teaching pronunciation techniques which she tried them before and proven effective. The workshop introduced different teaching pronunciation techniques, such as: teaching through songs, choir coaching, informal pronunciation rubrics, and ways/error correction strategies for raising students' awareness towards their pronunciation errors or mistakes.

The workshop duration was two hours and a half, with the attendance of 5 teachers: 4 from Grade 10 and 1 from Grade 11. Following the workshop, the teachers were requested to fill in an evaluation form to evaluate the workshop (See Appendix H) . The evaluation asked for the teachers' feedback concerning the following; the presenter, the Workshop Content, The workshop delivery, areas of strength and those of weakness, suggestions to improve the workshop and recommendations for other workshops. As for the presenter section, 96 % of the teachers strongly agreed that the presenter is knowledgeable about the presentation subject and well-prepared and showed enthusiasm and involvement in subject. As for the presentation content, 100 % of the attendees strongly agreed that the objective and purpose of presentation was clearly stated, the content was relevant to their needs and interests, and the content and activities presented were useful learning-teaching experience. As for the presentation delivery, 96 % of the attendees strongly agreed that the presentation time was adequate and well-paced, while 90 % strongly agreed that the audio and visual equipment were helpful and used appropriately.

The following were what the attendees liked best about the workshop:

The smooth transition among the parts of the workshop
Different interactive activities presented about various techniques for teaching pronunciation
Untraditional techniques presented for teaching pronunciation, like : choir coaching and singing
The knowledge and the experience of the presenter shared by the presenter and the applicability of the techniques shared.

The following were what the attendees liked the least about the workshop:

The theoretical part in the workshop was long somehow.
They preferred if the presenter could have had a less time talk and gave them more time to be involved in the discussion
Some power point slides are too wordy
The presenter should use more hands-on techniques for the activities used during the workshop

The following were the workshops topics that the teachers mentioned most interest in attending in the future:

Teaching writing interactively
Teaching listening interactively
Teaching IELTS as a test preparation

Action Plan:

Based on the teachers' suggestions for future workshops, an action plan will be proposed to offer one of the workshop topics suggested by the teachers for the second semester (2014-2015).

10. English Language Program Evaluation

I. Students' Final Program Evaluation, Grade 10

a. Level 1: Basic Level

The total number of Grade 10 students who completed final evaluation for the Evening English classes for Level 1(Basic Level) was 177 out of 210 student in both October and Ma'ady schools. The difference in number was due to the fact that some of the students were absent during the time the final evaluation was conducted because they were busy with Capstone projects and overloaded school schedule.

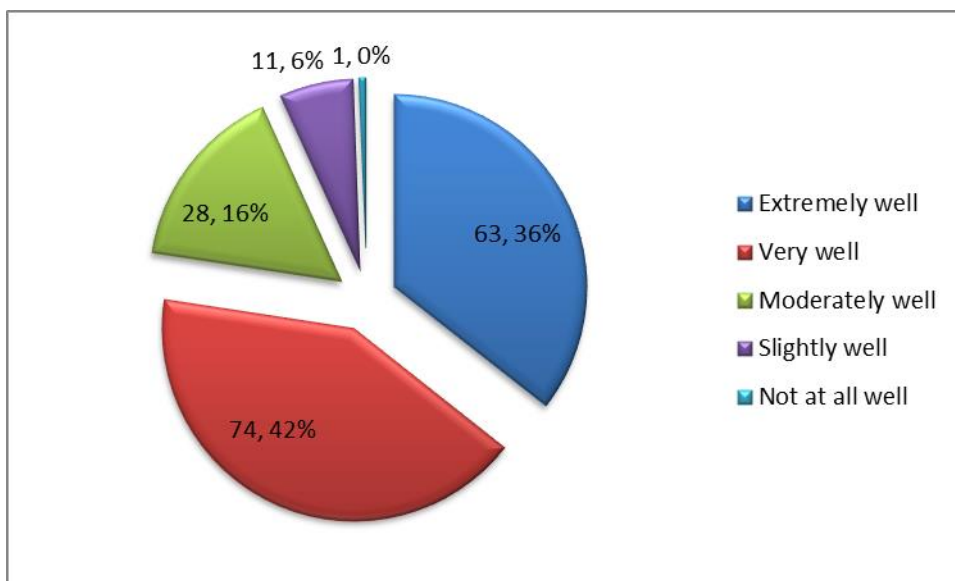
Different closed ended questions with four options were shared with the students throughout the evaluation of the course materials and curriculum they studied during the Evening English Classes. The options were ranging from "Extremely Well" and "Strongly Agree" to "Not at all well" and "Strongly Disagree". The course evaluation has two parts related to the curriculum: the first one is related to the course content and it has 4 questions as shown in table 13 below. As for the second part it evaluates the impact of the course and the material on the students' proficiency English level (see table 14 below). Also, students shared some qualitative and descriptive comments on the course material which were used to validate the results reached from the analysis.

The following table (13) summarizes and illustrates the Grade 10 students' opinion about the course content and material offered during the Evening English Classes at both October and Ma' ady Schools:

Curriculum and Course Content	Options				
	Extremely Well	Very Well	Moderately Well	Slightly Well	Not at all Well
Is related to English Language used in real life	71 (40%)	73 (42%)	25 (14%)	5 (3%)	2 (1%)
Helped me use English for assignments in STEM courses	47 (27%)	61 (34%)	40 (23%)	20 (11%)	9 (5%)
Is interesting	73 (41%)	62 (35%)	27 (13%)	13 (8%)	2 (1%)
Helped me improve my general English communication ability	63 (36%)	74 (42%)	28 (16%)	11 (6%)	1 (0%)

Table 13- Number and Percentage of Grade 10 Students choices for Basic Course Evaluation_ Part 1 (Content)

An analysis for table (13) and graph (R) above shows that the majority of Grade 10 students chose the “very well” option as an attempt to evaluate the Evening English Level 1 (Basic Level) material and content. This shows that the majority found that the course has helped them in writing their STEM courses assignments, is related to real language use and it has helped them to have better English communication abilities (as shown in graph R below). In addition, the majority of the students in both schools found that the course is interesting choosing “Extremely well” option with (41%).



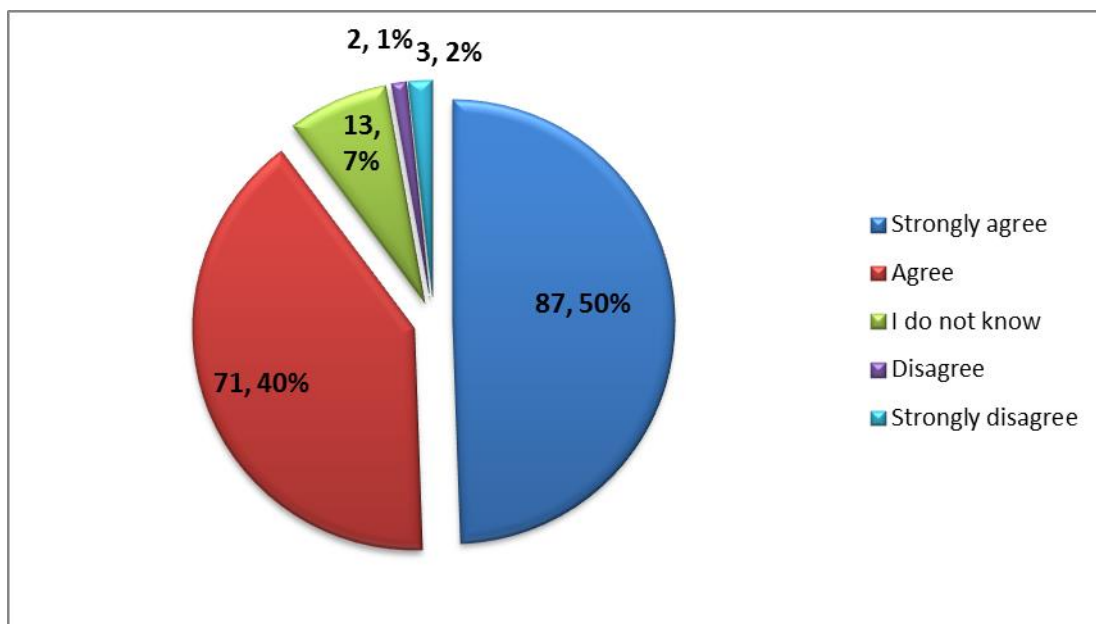
Graph R- Illustrates How the Basic Course has Helped Grade 10 Students Improve in General their English Communication Abilities

Table (14) and graph (S) illustrate the impact of the Basic course curriculum and content on the Grade 10 students’ performance in English language.

Curriculum and Course Impact	Options				
	Strongly Agree	Agree	I don’t Know	Disagree	Strongly Disagree
I am better able to understand things I read in English	46 (26%)	114 (64%)	10 (6%)	4 (2%)	3 (2%)
I am better able to complete their written assignments in English	46 (26%)	97 (55%)	22 (13%)	9 (5%)	2 (1%)
I am better able to speak with others in English	55 (32%)	82 (47%)	21 (12%)	12 (7%)	4 (2%)
I am better able to speak to understand videos/lectures/TV programs in English	54 (31%)	84 (47%)	25 (14%)	12 (7%)	2 (1%)

I know my strong and weak areas in English	87 (50%)	71 (40%)	13 (7%)	2 (1%)	3 (2%)

Table 14- Number and Percentage of Grade 10 Students choices for Basic Course Evaluation_ Part 2 (Course Impact)



Graph S- Illustrates the Grade 10/Basic Level Students' Opinion in Evaluating their Strong and Weak Areas in English

An analysis for table (14) and graph (S) above shows that the majority of Grade 10 students chose the "Agree" option with a percentage ranging from 40% to 64% as an attempt to evaluate the Basic level material impact on their English language progression. An exception for this was in the last statement "I know my strong and weak areas in English"; the majority (87 students) here chose "Strongly Agree" (50%) in comparison to the rest of the options. This indicates that the teaching methods, monitoring and feedback techniques adapted by the teachers in class are in fact well identified by the student. In addition, the Basic level content has been re-visited and adjusted according to address students' language needs and interests. The Summer Course evaluation has been also taken into consideration as an attempt to help students identifying their weakness and strengths in different English language areas and work on improving those which have been identified during the Summer Course. For more information about the analysis of the Basic Level final course evaluation, see Appendix G.

-Recommendations for Improving the Basic Level Curriculum

The above mentioned quantitative data was supported by considerable comments Grade 10 students shared in both schools showing their opinion about the Basic course curriculum. The following is a summary for the students' comments at Ma'ady (Table 15) and October (Table 16):

SUMMARY of Students Comments- Maady School	
Benefits from the Course Content	Suggestions for Improvement
1. The course was very useful/beneficial 2. The course improved my confidence/ability to use English. 3. The material was interesting. 4. The course helped me understand English in my STEM subjects.	1. We need to watch more videos. 2. We need to have more speaking with different accents. 3. We need more writing tasks and more words. 4. We need more grammar. 5. We need more presentations and presentation skills to gain more self-confidence. 6. We need to practice listening and writing at home.

Table 15- A Qualitative Summary for the Grade 10 Students' Comments on the Basic Course Content and Suggestions for Improvement- Ma'ady School

Students Comments- October School	
Benefits from the Course Content	Suggestions for Improvement

1) The course is interesting/fun/ wonderful. The course helped us to gain many new qualities/was useful/important. 2) We want to continue with STEM vocabulary.	1. Enhance the feedback we receive on our speaking 2. We need grammar in the course. 3. Make more role plays and games 4. We need more homework in the weekends to get more marks. 5. We need more listening practices. 6. We need to cancel the STEM vocabulary section.
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Table 16- A Qualitative Summary for the Grade 10 Students' Comments on the Basic Course Content and Suggestions for Improvement- October School

Based on analysis of student feedback, it is recommended that we add extra listening practice and speaking activities including videos with different English accents to the Basic level curriculum. It is also recommended to focus more on adding more writing practices and exercises and assign some as assignments. More vocabulary is recommended to be added. In addition, it is recommended to add more presentations to the curriculum and practice more feedback techniques concerning their speaking including fluency and accuracy. Different grammar points and areas can be covered implicitly through the feedback given by teachers. All of these suggestions will be accounted for in the revised e-STEM online, which students will use in the 2015-16 academic year (during this year, we will transition from the face-to-face after-school program to the online learning support program).

b. Level 2: Pre-Intermediate Level

The total number of Grade 10 students who conducted the final evaluation for the Evening English classes for Level 2 (Pre-Intermediate Level) was 41 out of 45 student in both October and Maady schools. The little difference in number was due to the fact that some of the students were absent during the time the final evaluation was conducted because they were busy with Capstone projects and overloaded school schedule at Maady school.

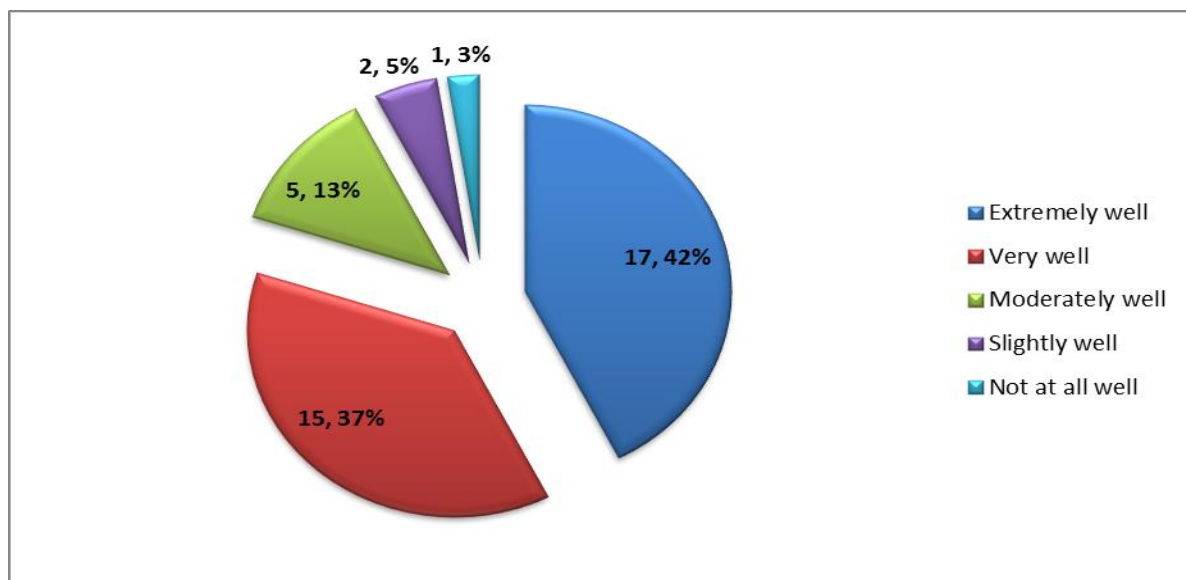
Different closed ended questions with four options were shared with the students throughout the evaluation of the course materials and curriculum they studied during the Evening English Classes. The options were ranging from "Extremely Well" and "Strongly Agree" to "Not at all well" and "Strongly Disagree". The course evaluation has two parts related to the curriculum: the first one is related to the course content and it has 4 questions as shown in table (17) below. As for the second part it evaluates the impact of the course and the material on the students' proficiency English level (see table 18 below). Also, students shared some qualitative and descriptive comments on the Pre-Intermediate course material which were used to validate the results reached from the analysis.

The following table (17) summarizes and illustrates the Grade 10 students' opinion about the Pre-Intermediate course content and material offered during the Evening English Classes at both October and Maady Schools:

	Options				
Curriculum and Course Content	Extremely Well	Very Well	Moderately Well	Slightly Well	Not at all Well
Is related to English Language used in real life	19 (46%)	15 (37%)	5 (12%)	1 (3%)	1 (2%)
Helped me use English for assignments in STEM courses	7 (17%)	18 (44%)	6 (15%)	7 (17%)	3 (7%)
Is interesting	19 (46%)	9 (22%)	9 (22%)	3 (7%)	1 (3%)
Helped me improve my general English communication ability	17 (42%)	15 (37%)	5 (13%)	2 (5%)	1 (3%)

Table 17- Number and Percentage of Grade 10 Students choices for Pre-Intermediate Course Evaluation_ Part 1 (Content)

An analysis for table (17) above shows that the majority of Grade 10 students chose the “Extremely Well” option as an attempt to evaluate the Evening English Level 2 (Pre-Intermediate Level) material and content. This shows that the majority found that the Pre-intermediate course has found the course related English language used in real life world, is interesting and beneficial and has helped students improving generally in their English communication abilities and skills (as shown in graph T below). On the other hand, 44% of the students have found that the Pre-intermediate course has helped them “very well” in writing their STEM courses assignments. This shows that more attention should be given to the Writing skill and activities to help students achieve effectively their writing assignments in their STEM core subjects.

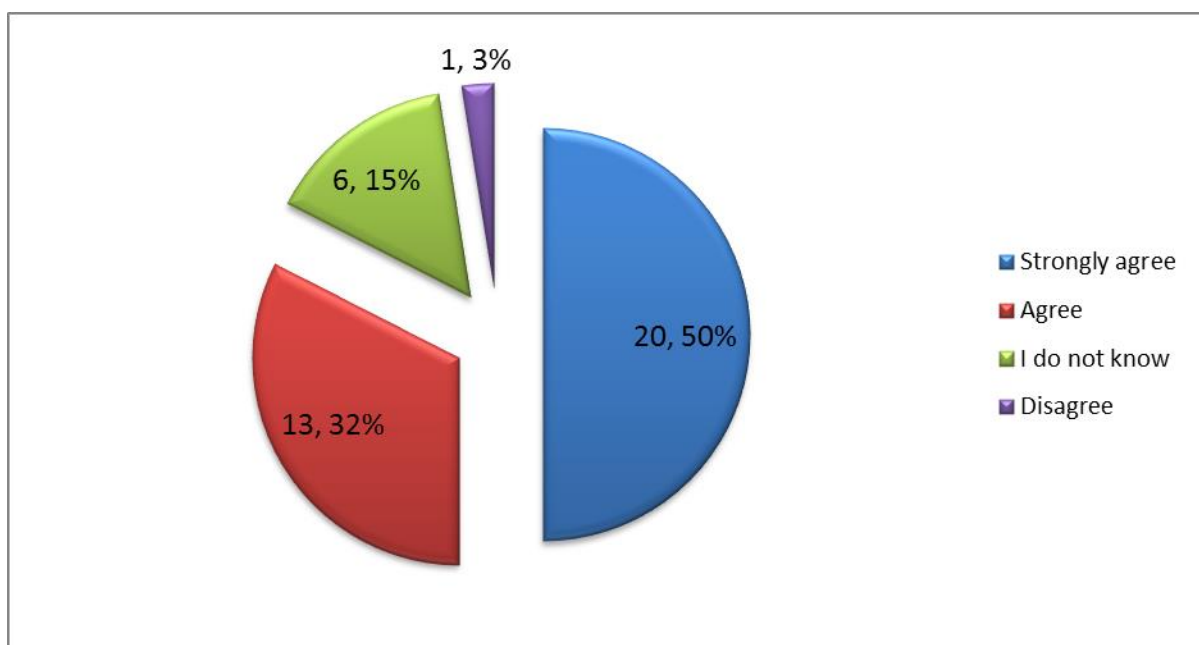


Graph T- Illustrates How the Pre-Intermediate Course has Helped Grade 10 Students Improve in General their English Communication Abilities

Table (18) and graph (U) illustrate the impact of the Pre-Intermediate course curriculum and content on the Grade 10 students' performance in English language.

Curriculum and Course Impact	Options				
	Strongly Agree	Agree	I don't Know	Disagree	Strongly Disagree
I am better able to understand things I read in English	11 (37%)	24 (60%)	1 (2%)	3 (8%)	1 (3%)
I am better able to complete their written assignments in English	15 (37%)	15 (38%)	8 (20%)	2 (5%)	0 (0%)
I am better able to speak with others in English	18 (45%)	18 (45%)	3 (7%)	0 (0%)	1 (3%)
I am better able to speak to understand videos/lectures/TV programs in English	22 (55%)	14 (35%)	3 (7%)	0 (0%)	1 (3%)
I know my strong and weak areas in English	20 (50%)	13 (32%)	6 (15%)	1 (3%)	0 (0%)

Table 18- Number and Percentage of Grade 10 Students choices for Pre-Intermediate Course Evaluation_ Part 2 (Course Impact)



Graph U- Illustrates the Grade 10/Pre-Intermediate Level Students' Opinion in Evaluating their Strong and Weak Areas in English

An analysis for table (18) and graph (U) above shows that the majority of Grade 10 students chose the “Agree” option (60%) stating that their reading ability has been improved. As for their writing and speaking abilities, students equally chose “Strongly Agree” and “Agree” options with 37% and 38% respectively for their writing ability and 45% for their speaking ability. This indicates that the materials used in class, teaching methods, monitoring and feedback techniques adapted by the teachers successfully attended and appealed to the Pre-Intermediate students’ language needs and interests. For more information about the analysis of the Pre-Intermediate Level final course evaluation, see Appendix G.

-Recommendations for Improving the Pre-Intermediate Level Curriculum

The above mentioned quantitative data was supported by considerable comments Grade 10 students shared in both schools showing their opinion about the Pre-Intermediate course curriculum. The following is a summary for the students’ comments at Ma’ady (Table 19). As for October, no qualitative comments were received from the Pre-Intermediate:

Students Comments- Ma'ady School	
Benefits from the Course Content	Suggestions for Improvement
1. The course in the writing skill is useful. 2. The English course is very interesting, especially with the videos. 3. I enjoyed the course very much	1. The course should have more listening and writing practices. 2. We need to study more word formation. 3. We suggest removing the Explicit Vocabulary Section that covers STEM vocabulary. Although it is useful, we need to focus more on language skills area.

Table 19- A Qualitative Summary for the Grade 10 Students' Comments on the Pre-Intermediate Course Content and Suggestions for Improvement-Ma'ady School

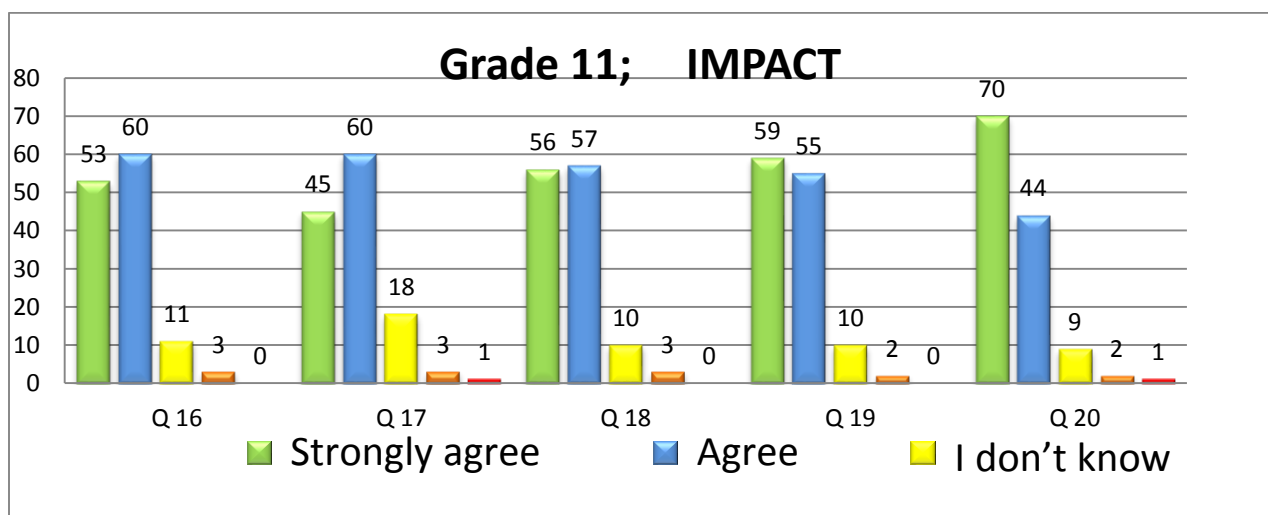
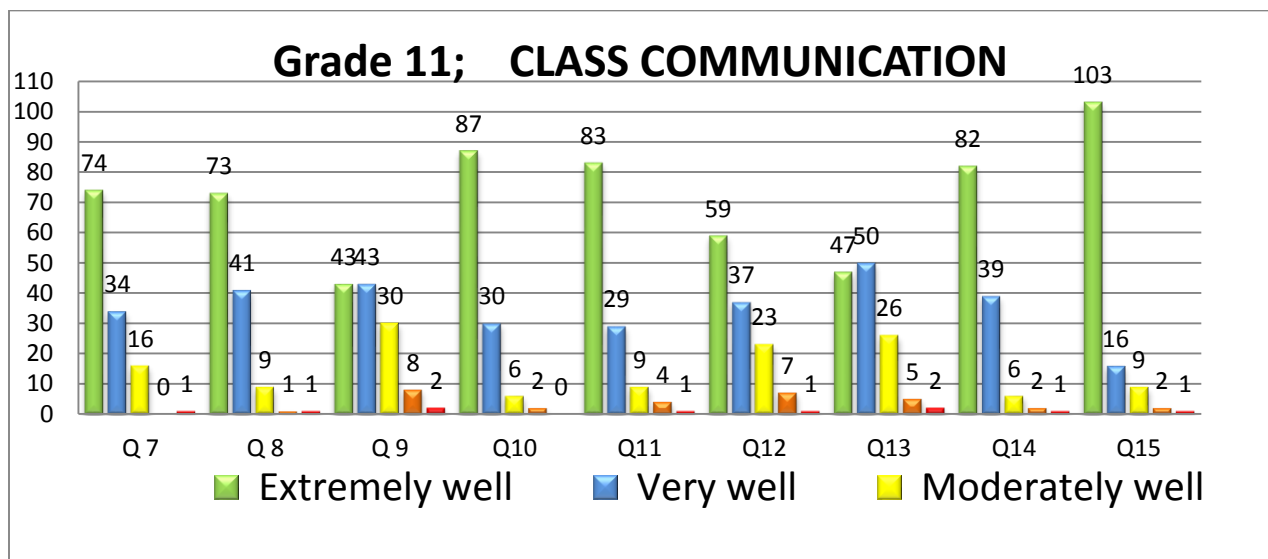
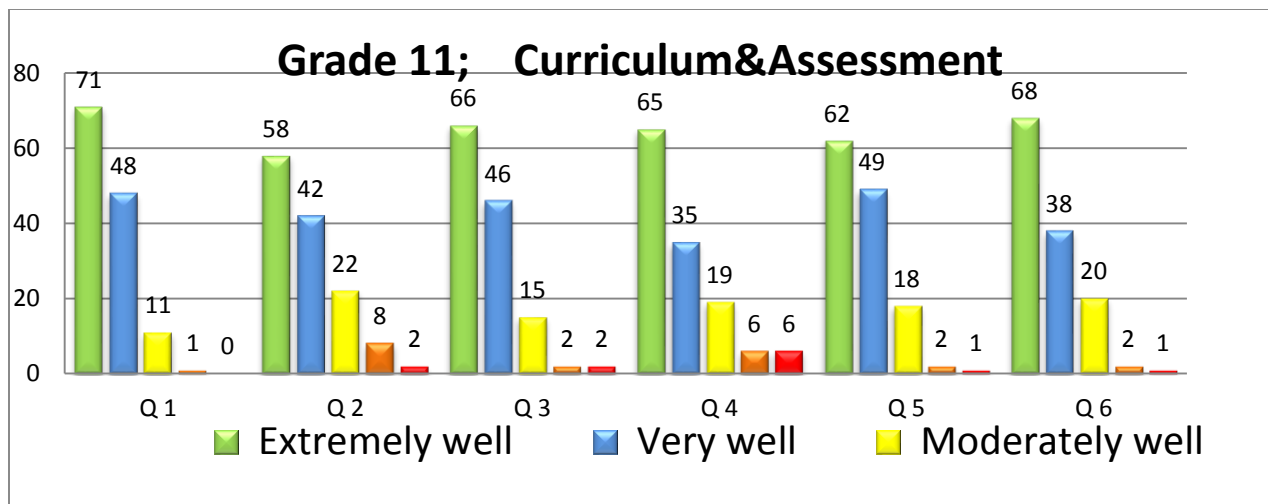
Based on the above mentioned analysis and the students' suggestions, it is recommended to add extra listening practice and writing activities to the Pre-Intermediate level curriculum. More vocabulary and word formation are also recommended to be added to the curriculum. Although continuing with integrating STEM vocabulary with the curriculum is suggested by the Basic level, STEM vocabulary is perceived by the Pre-intermediate level with less importance. This can be due to the higher proficiency level of the Pre-Intermediate students in reading and writing skills (B1 & B2 on CEFR bands) in comparison to the Basic level (A1 & A2 for both skills).

Grade 11

By the end of the academic term, the ELP Conversation STEM students in both Ma'ady and October schools were requested to fill in the end of the Program Evaluation. The evaluation aimed at collecting the students' feedback in the following regards:

- a. Curriculum and Assessment
- b. Class Communication
- c. Level Impact.

The following graphs indicate the students feedback status in each of the evaluation regards.



Q	Comments
Q1	<i>What do you think of this course?</i>
	<i>1- it's very useful, nice , very important , interesting , beneficial , objective and appropriate material to study.</i>
	<i>2- This course is l'm improvement in his way and its quite effective more than the last course regarding or needs and goals.</i>
	<i>3- This course was very excited one. I didn't feel boring at all. There were a lot of activities and completions.</i>
	<i>4- Its Awesome, Magnificent and supercool.</i>
Q2	<i>How much does this course suit your needs? why?</i>
	<i>1- 90 % I have to communicate in English in real life. It help strongly in listening, reading and specially speaking and the pre academic one.</i>
	<i>2- it provided my skills like listening and speaking but sometimes it wastes my time</i>
	<i>3- very well because it help me with preparing to TOEFL.</i>
Q3	<i>What do you think your teacher is missing in his teaching style?</i>
	<i>Nothing really. I don't think so.</i>
	<i>At together my teacher efforts are respectable and he has one way in dealing with his students making a climate of cooperation in the course.</i>
	<i>Nothing miss my teacher.</i>
Q4	<i>What do you think is missing in this course?</i>
	<i>Nothing. May be some good vocab & some writing.</i>
	<i>More speaking and reading to get more development in my skills.it will be better to have more activities to force us to work.</i>
	<i>The focus on the academic skills strongly as we in this course is trying hardly to be professional academically.</i>
Q5	<i>If you have the authority to change, remove, or add something in this course, what can it be?</i>
	<i>Make a break between 2 hours and don't change Mr. Rami because we love him.</i>

	<i>Remove some of the reading passages, I'm Ahmed Mohamed Ahmed and I really want Mr. Ramy to teach me next semester.</i>
	<i>I will focus on the academic level of the students more than and I won't change anything else of this course as its being more useful and helpful.</i>
	<i>I want to be with my teacher next semester, and remove the difficult listening and add more idioms</i>
	<i>I want My teacher to be my teacher next level.</i>
	<i>6- we can use more visual aids to explain lessons and add more writing assignment and some grammar rules.</i>

Check Conversation Level ELP Students Evaluation. Summary Analysis

As per the students' feedback to the course, integrating the test preparatory materials in the regular course content seemed to be a quite effective and successful idea. Based on the teachers' feedback the major change can be implemented for the future levels can be the grades distribution.

II. ELP Teachers Program Evaluation

At the end of the academic term, the ELP teachers were requested to fill in the end of the Program Evaluation. The evaluation aimed at collecting the teachers' feedback in the following regards; Communication tools; means, frequency, effectiveness, at convenience; School Facilities and technology support; Course content, objectives, materials; Assessments, quizzes, final exams, grades distribution; Professional development, workshops, class visits, feedback; Administration logistics, payment and transportation; roles of the Academic Manager and Program Director. The program evaluation aimed at improving the program quality for both teachers and students.

Grade 10 teachers; Basic and Pre-Intermediate levels as well as Grade 11 teachers; Conversation Level, T the conducted the ELP final Program Evaluation. The Evaluation aimed at assessing the following areas:

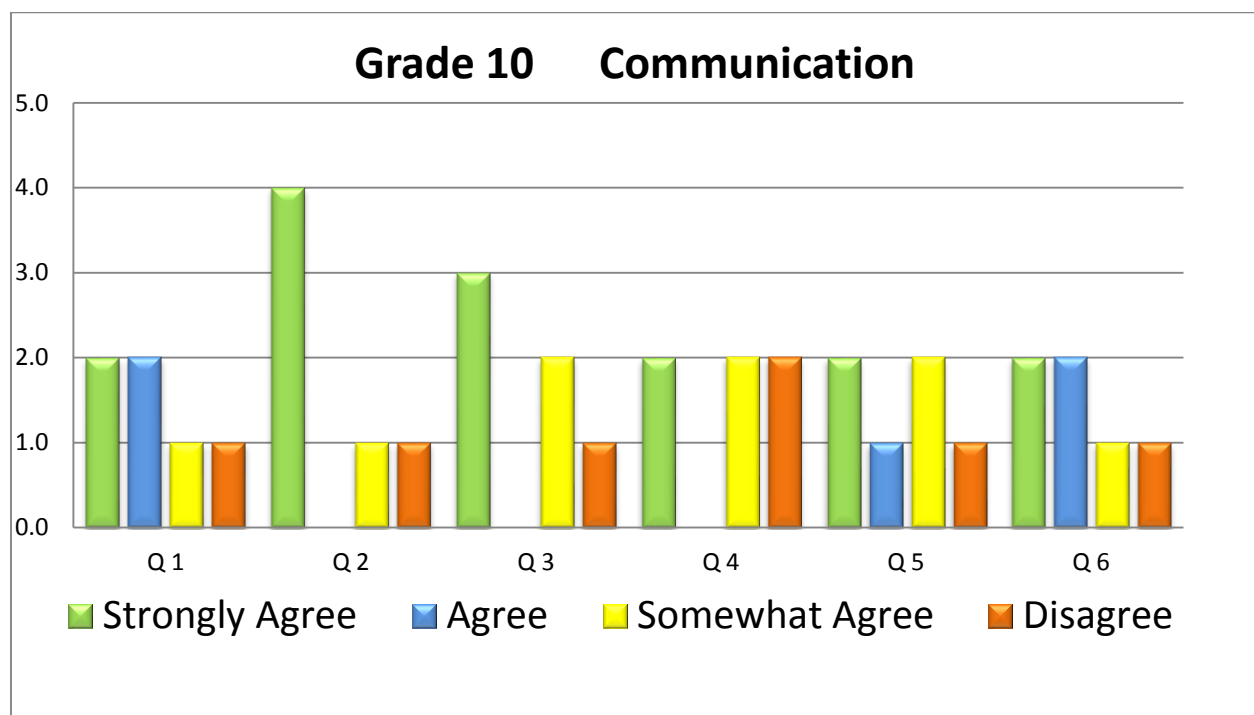
- a. Communication
- b. School Facilities
- c. Course Content
- d. Assessment
- e. Professional Development
- f. Administration Logistics

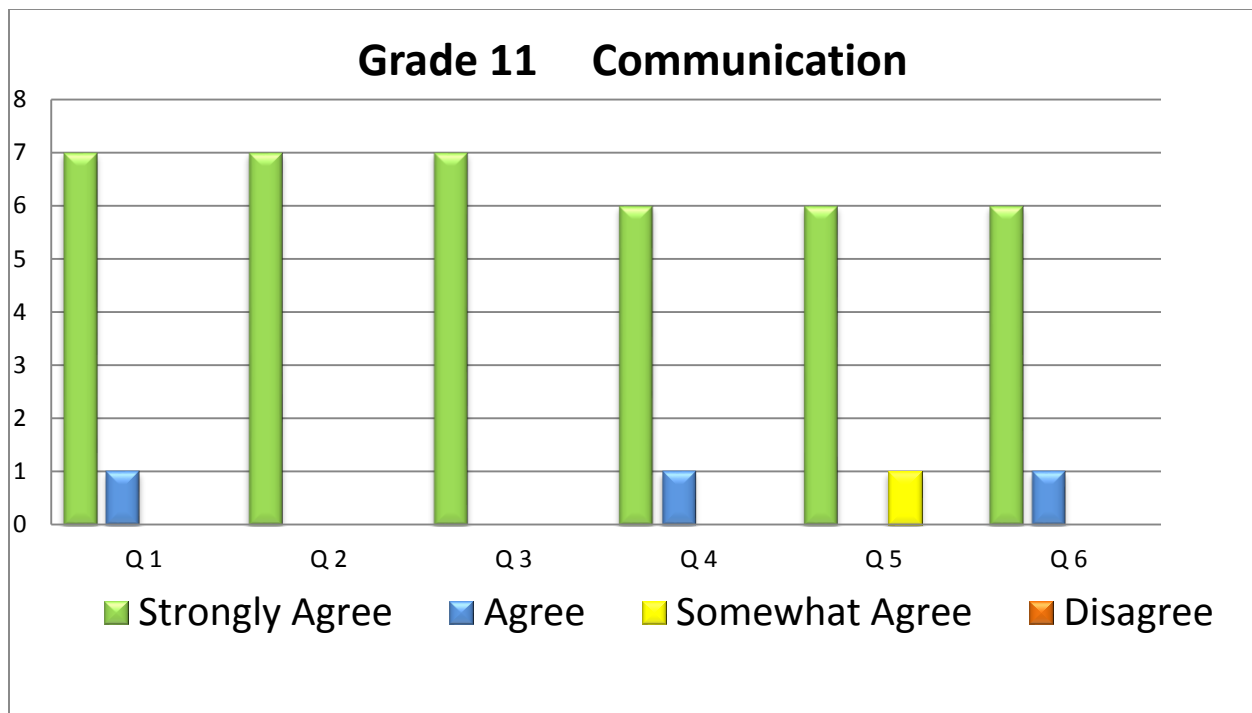
The teachers' input, comments, and suggestions are carefully considered to identify areas of weakness and strength in the program. Findings help the project to enhance the ELP to better meet the program objectives for the teachers and the students.

Teachers provided qualitative comments about the program in each area. Below is a summary of course themes of strength and challenges that emerged from the feedback data.

1. Communication

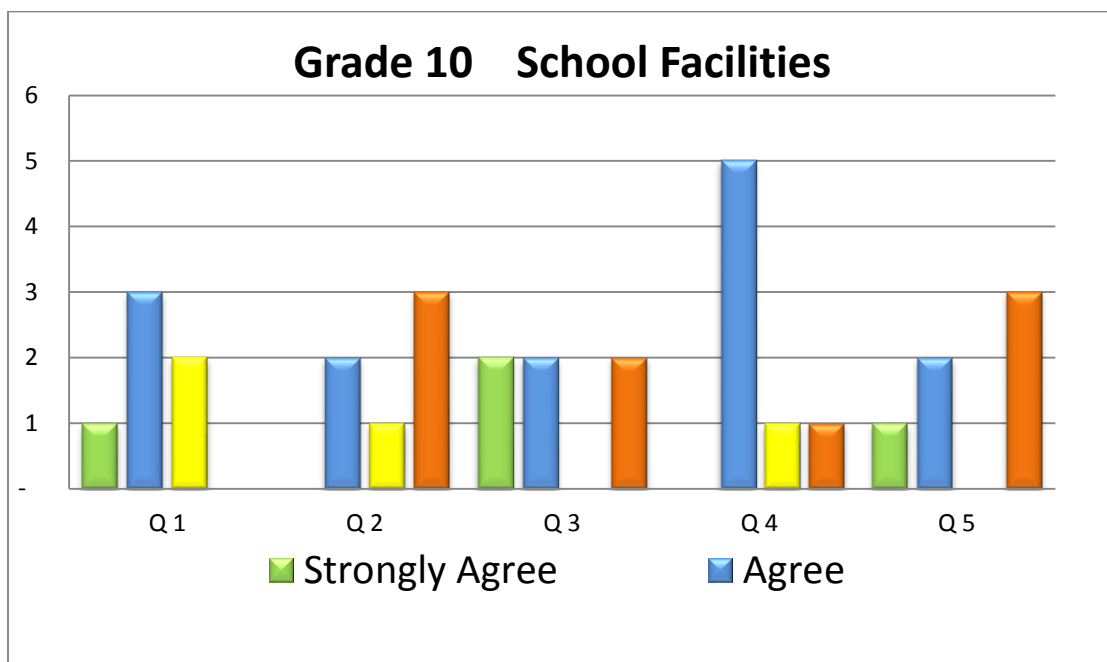
Summary of Strengths	Summary of Challenges
<p>Meetings frequency was convenient to teachers' schedules and the program duration.</p> <p>Meeting content was appropriate.</p> <p>Communication; email, face to face or by phone, was convenient, clear, and effective.</p>	<p>Tone/content of some meetings was ineffective.</p> <p>Frequency/content of communication - face to face or by phone and email just too much to filter/ intimidating</p>

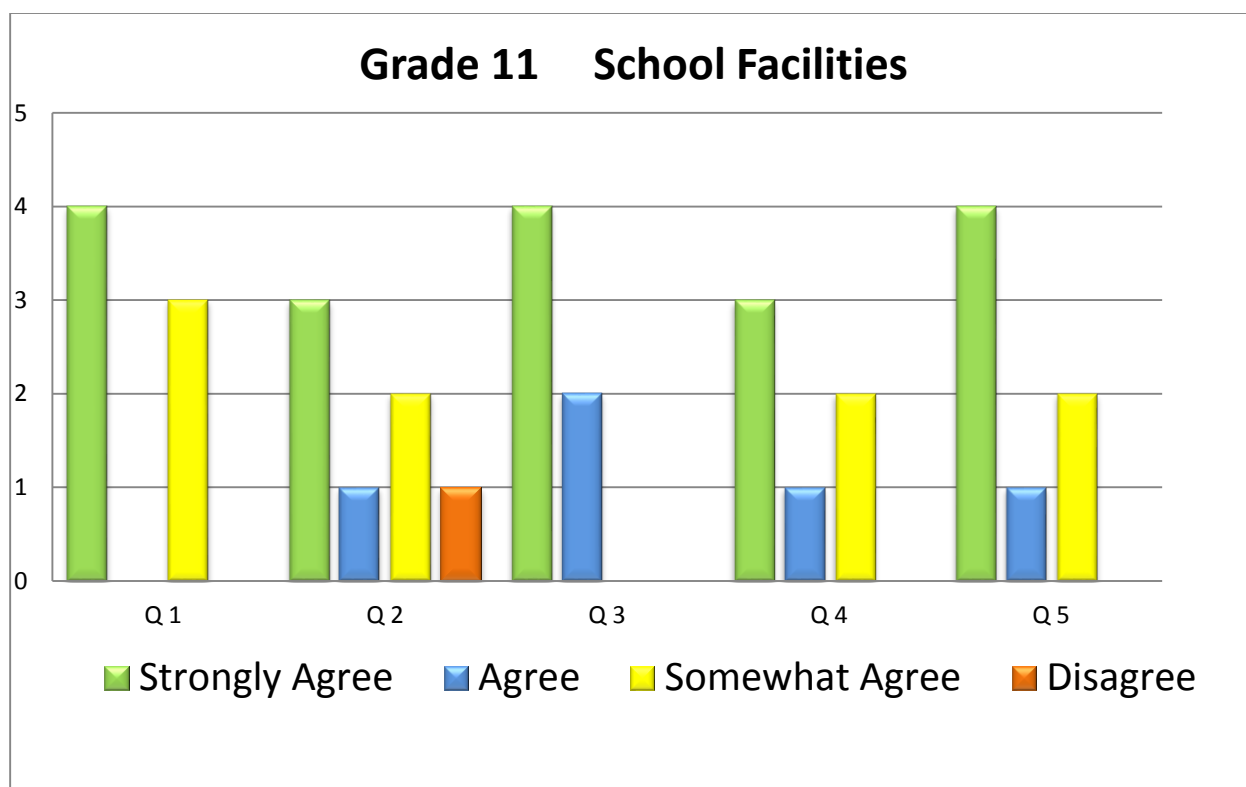




As for Grade 11 columns above, at least 6 out of 7 teachers were strongly satisfied with the communication level; meetings frequency, meetings duration, meetings effectiveness, as well as the oral and written communication. The only aspect might need some more work will be the clarity and effectiveness of oral communication.

2. School Facilities	
Strengths	Challenges
<p>Mr. Hamada and Guneidy were most cooperative</p> <p>The IT specialist was supportive during the summer, but I never saw him during the evening classes.</p>	<p>Classrooms were sometimes locked or not clean for ELP.</p> <p>Sometimes classroom AV was unavailable.</p>



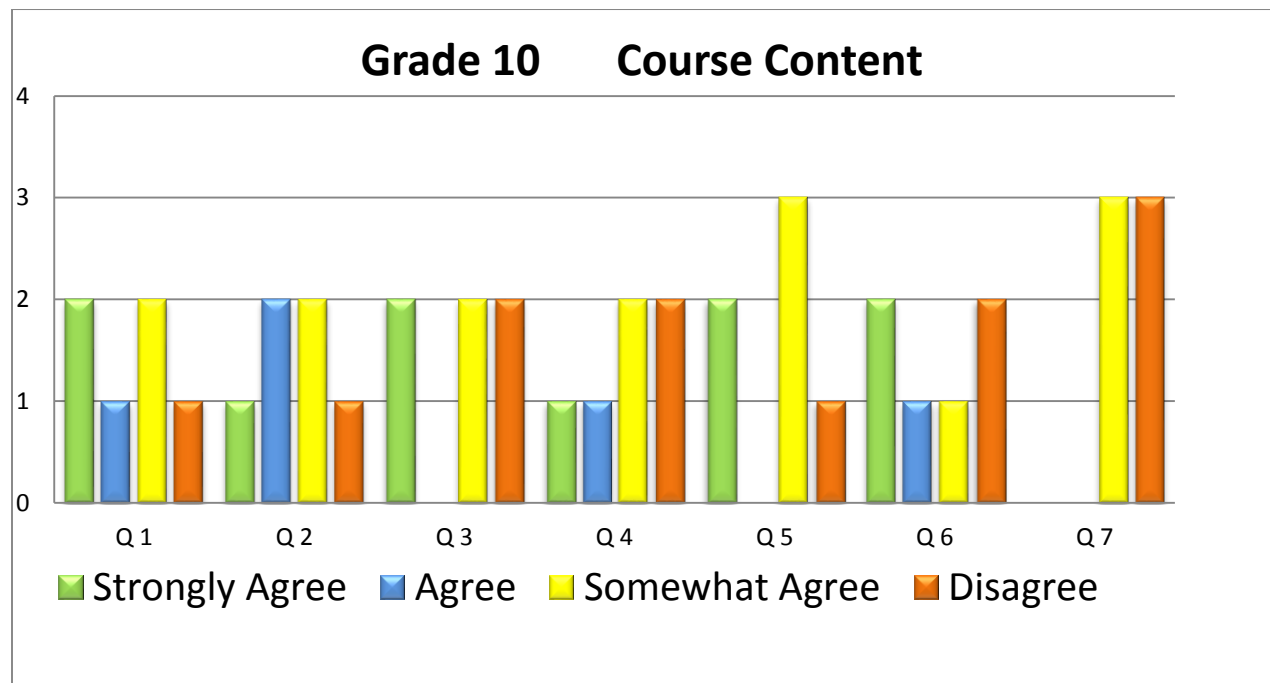


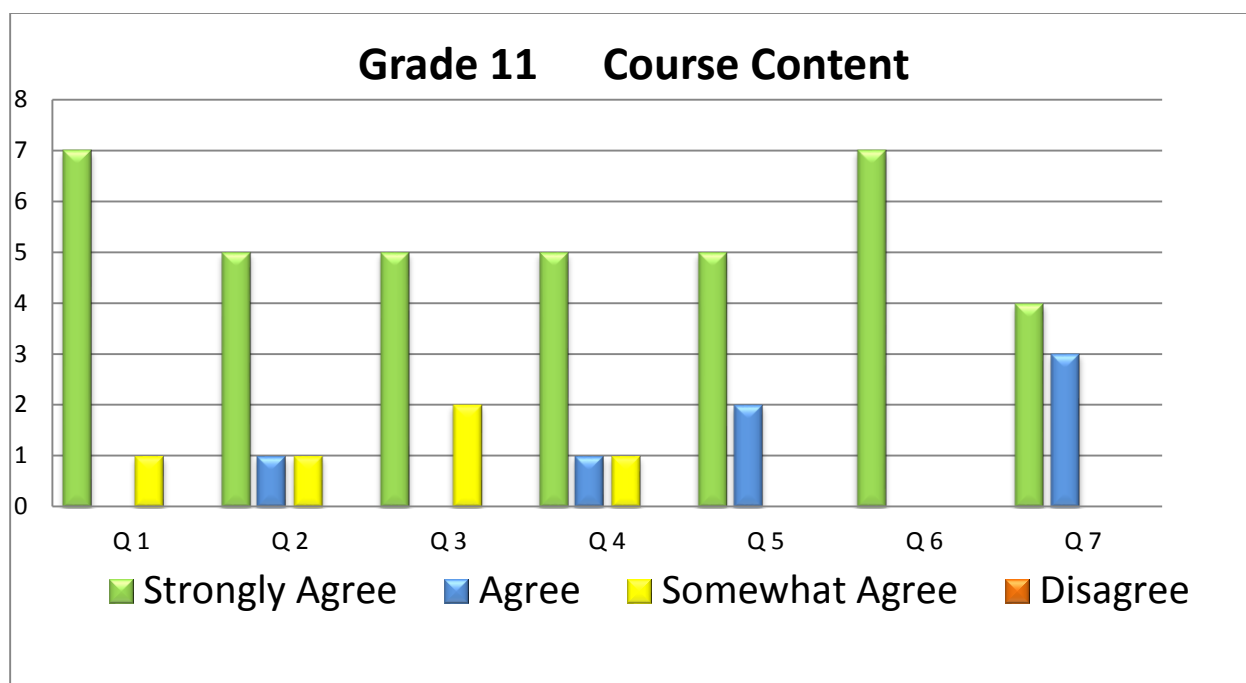
As per Grade 11 columns above, only 4 teachers were strongly satisfied with the some of the schools facilities; Classrooms equipment, materials availability, and IT support, The classes hygiene is only aspect that has been unsatisfying to the teachers in both schools although it has been always communicated with the schools administration.

3. Course Content	
Strengths	Challenges
<p>The material was very rich and well prepared.</p> <p>Test-preparation material was well prepared.</p>	<p>The objective of STEM vocab and the extended reading was not clear enough to the students.</p> <p>Sadly the course objectives weren't always clear to me, and hence for the students.</p> <p>The materials were not always interesting at all for teenagers.</p> <p>There was no balance in enhancing the students four skills; R., L., S., and W.</p>

Very few teachers provided comments on course content, most probably because issues were dealt with on a weekly basis throughout the course. However, teachers generally appear to be satisfied with course

content and materials, but would benefit from more clarity on the purpose of STEM-specific vocabulary components and extensive reading programming. Interestingly, teachers' comments (albeit few) do not align with those of students, who overwhelmingly found courses to be highly engaging and beneficial in both qualitative and quantitative findings.

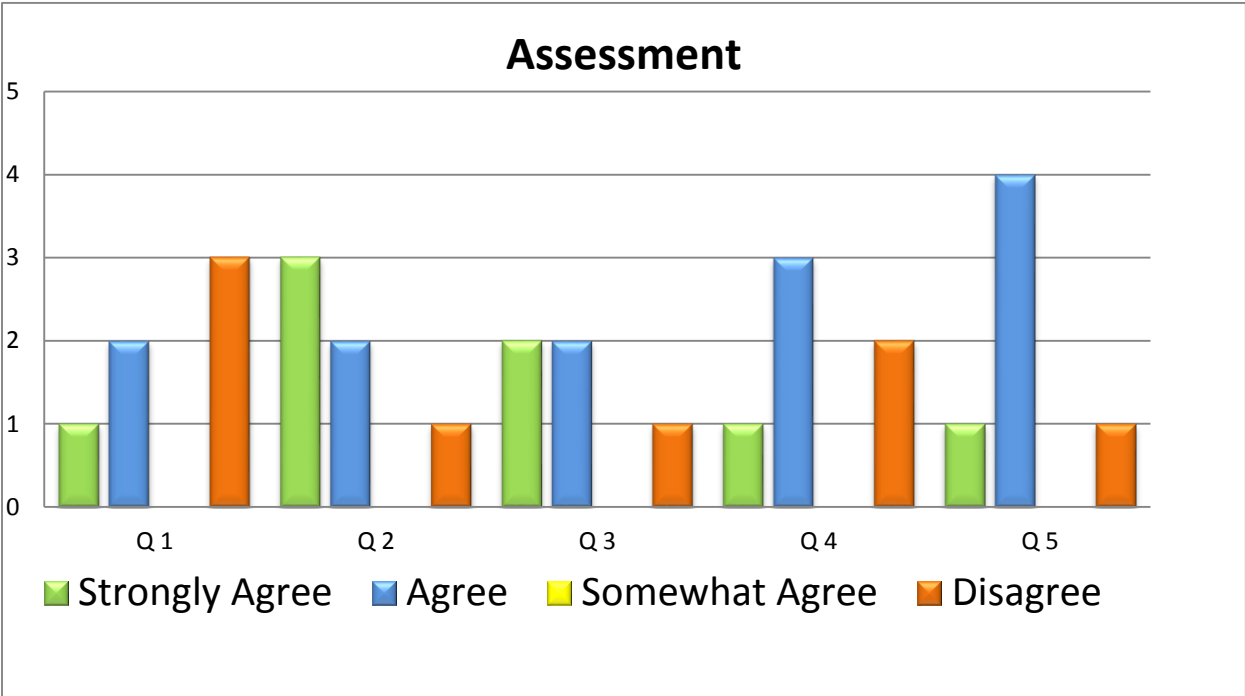


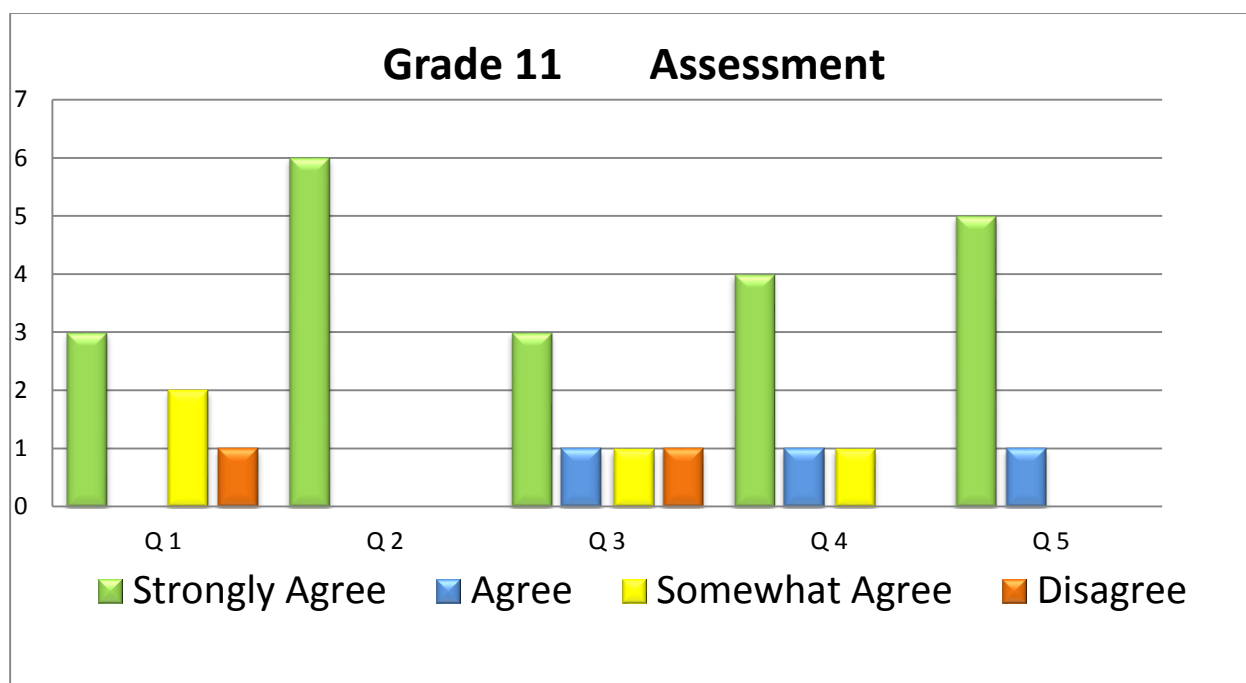


As per the columns above, 7 teachers were strongly satisfied with the course objectives and the course materials. The course materials have been changed based on the students' requests and needs, as explained in the **Curriculum Planning, Implementation, and assessment**.

4. Assessment	
Strengths	Grade 11
<p>1. Assessments, Baseline and Exit Exams were reflecting the purposes and the objectives of the course.</p>	<p>1. The course objectives were adequately reflected in the assessments</p> <p><i>The material was enhancing the four skills, but the presentation skills were given as an extra material. I suggest that we impd some presentation skills material</i></p> <p>2. The assessments overall grades were effectively and adequately distributed.</p> <p><i>- I suggest that we give the smaller weight of the grades for the first presentation.</i></p> <p><i>- My suggestion is not to assess the oral production only, we should add assessment sections for attendance and participation in class. Also, as we added TOEFL sections after.</i></p>

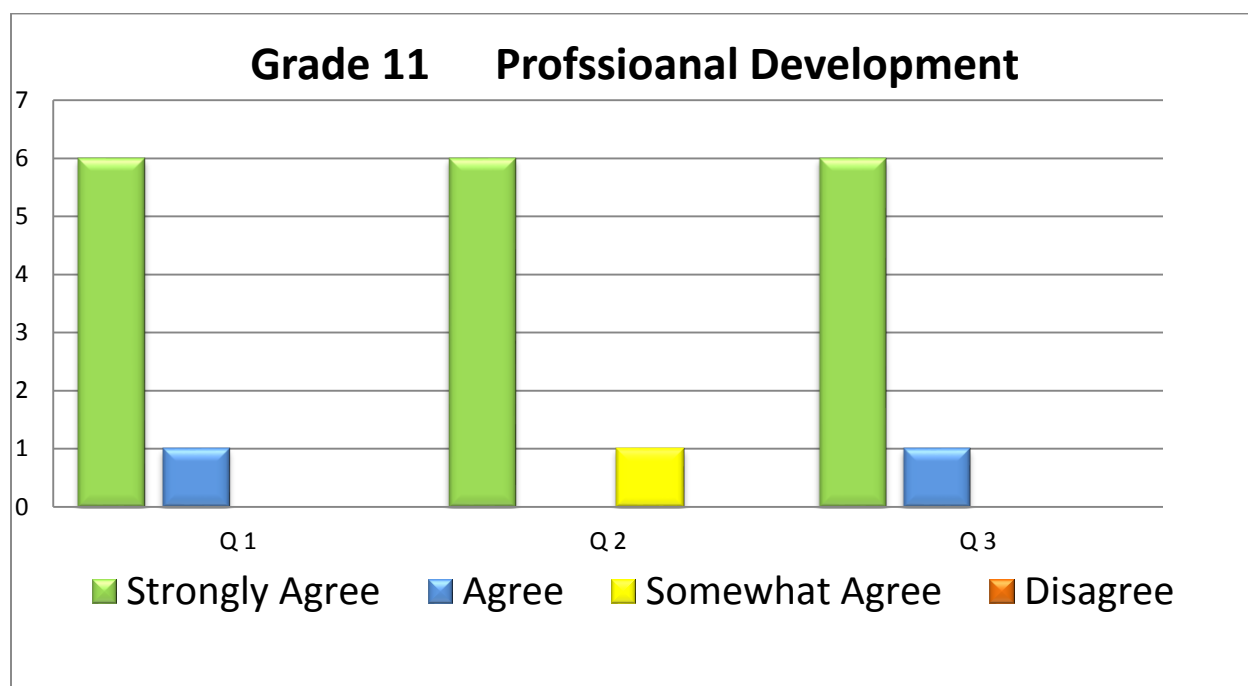
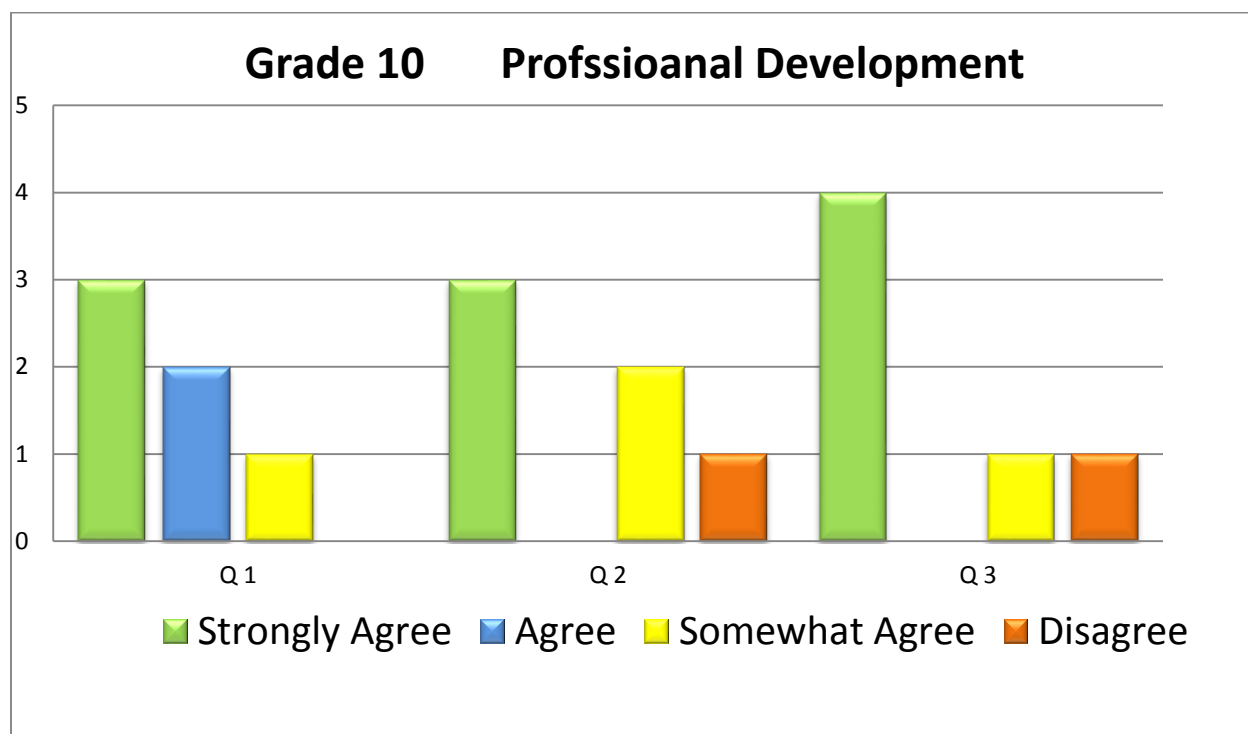
	<p>More weight should be given to the final presentations and there should be more graded presentations added to the assessment strategies.</p> <p>Less weight should be given to the first presentation.</p> <p>During course assessments and Quizzes need to be more effectively challenging for the students</p>
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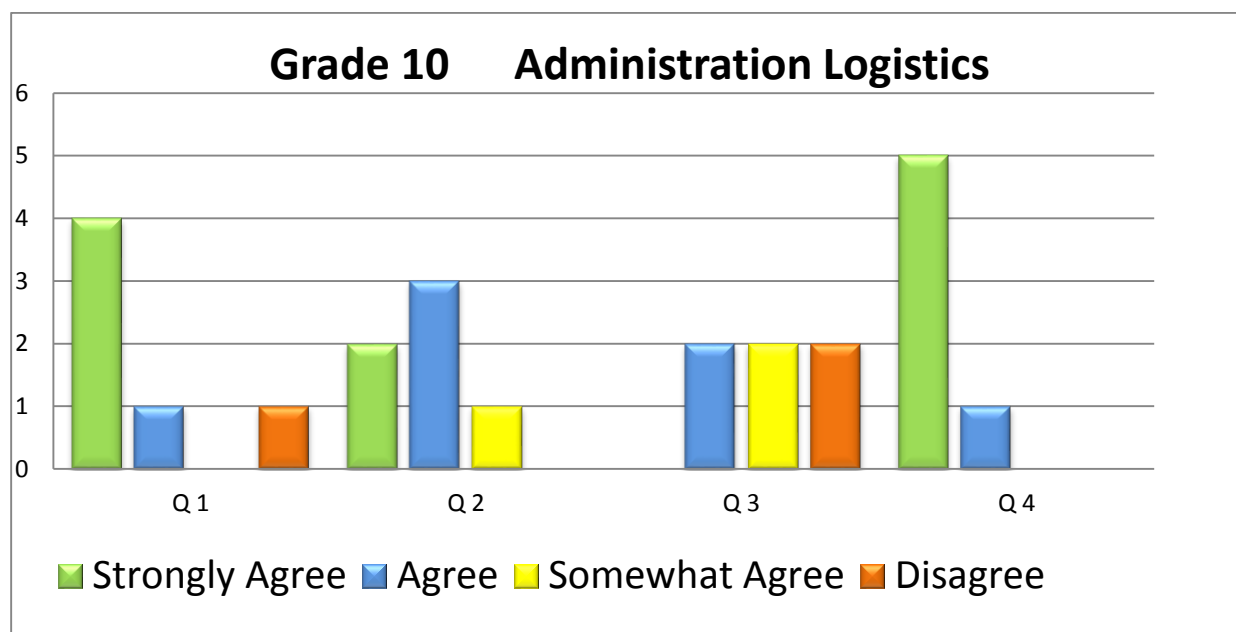
As per Grade 11 columns above, all teachers believed that The Presentations and debates Dates were adequately scheduled along the course duration. The assessment overall grades are to be revisited in order to be effectively and adequately distributed.

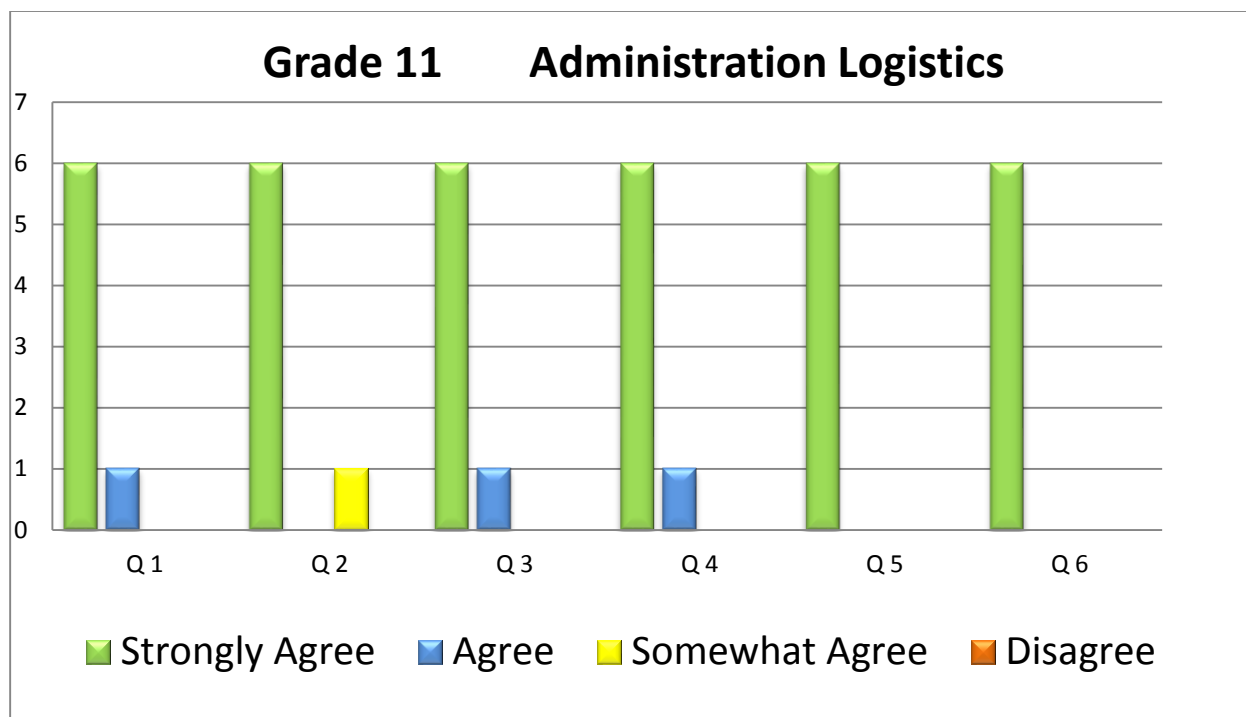
5. Professional Development	
Strengths	Challenges
<ol style="list-style-type: none"> The Program added value to my teaching experience The professional development workshop on teaching pronunciation ran and introduced effective teaching methods 	<ol style="list-style-type: none"> <i>The Program added value to my teaching experience</i> Interaction with the students and program director highly did. <i>The teaching materials for the upcoming levels need to be re-visited to select resources that get students more engaged and satisfy their language interests and needs</i> More workshops are needed for teachers, especially on writing correction



As per the columns above, almost all the teachers believed that the program added value to their teaching experience and sources and shared Professional Development Opportunities announcements continuously.

6. Administration Logistics	
strengths	challenges
At the beginning there were some challenges with transportation; however, teachers' transportation needs and payment process were accommodated.	<p>The Program Director was Flexible enough with the teachers' requests and suggestions.</p> <p><i>Amira gave a room for creativity to the teachers. She was very flexible in a productive way.</i></p>





As per Grade `11 columns above, the hourly pay might be the only aspect might need to be revisited by the administration. On the other hand, the Program Director showed enough flexibility to the teachers' requests and suggestions and even gave room for production and creativity.

The following are the Conversation teachers' comments on:

- I. The ELP areas praised by the English teachers.
- II. The areas believed should be reconsidered by the ELP.
- III. The suggestions for ELP by the teachers.

Q	Grade 10 Teachers' Comments
1	What are some specific things you liked about working in the ECASE ELP team?
	<i>Cooperation and sharing ideas</i>
	<i>They were always supportive and helpful.</i>
	<i>Cooperation and sharing ideas</i>
	<i>I was a bit worried at the beginning as I joined the program in the middle, but team was supportive and handled my questions/concerns promptly.</i>

2	What are some specific things you believe should be revisited in the ECASE ELP team?
	<i>Concerning the team members, nothing needs to be revisited.</i>
	<i>I 'd say that some meetings are not necessary at all and can just be sent by emails instead of wasting all that time. Also correction time and meeting time need to be clear for everybody from the beginning because negotiation here is weird.</i>
3	What suggestions do you have for the ELP?

Q	Grade 11 Teachers' Comments
1	What are some specific things you liked about working in the ECASE ELP team?
	<i>Everything; literally everything; organization, facilities, supervisor's support, communication, payments, follow-ups ..etc.</i>
	<i>Perfect coordination, Team work, new resources, perfect experience.</i>
	<i>The students' active spirit.</i>
	<i>The team I'm working with and the supervisor.</i>
	<i>The fact that the teaching experience is adding good value to my professional and personal life. I have to be honest and say that I still enjoy teaching at STEM much more than I do at my full-time job!</i>
	<i>Amira and her team co operation</i>
	<i>Teachers' quality</i>

2	What are some specific things you believe should be revisited in the ECASE ELP team?
	<i>Transportation because schools are in remote areas and we need to be provided with safe transportation</i>
	<i>The course content and objectives would better be clear and decided from the beginning. In this case, we basically changed the “conversation” course that we initially started with and told the students about to a “general” course after the midterm. Some of the students even commented: “This is a conversation course! Why should I study writing now?”</i>
	<i>The presentations and debates rubrics would preferably be photocopied and left at the school for the teachers’ use. We got only the rubrics for the first presentation and therefore, we had to photocopy everything else ourselves. But due to time constraints, on a couple of occasions I had to use only one rubric, and tell each student orally what he needs to improve/keep up instead of write the feedback on the rubric.</i>
	<i>Students who didn’t attend the course regularly shouldn’t be allowed to evaluate the teachers. (They are not qualified to do so anyways!). The teachers’ evaluation maybe taken online with the students names known to the director so that she would know whose presentation should be taken into consideration and whose presentation shouldn’t.</i>
3	What suggestions do you have for the ELP?
	<i>I think it's perfect</i>
	<i>The course should last longer (like 2 weeks more)</i>

Check Conversation Level ELP Teachers Evaluation. Summary Analysis

11. Extra Curriculum Activities for Grade 11 Students

Movie Night

An event of a movie night was planned for girls at Ma’ady STEM School. The selected movie was "You've Got Mail" for Tom Hanks and Meg Rayan. Although the movie is relatively old, according to the Movie Night administrator’s experiences in different locations; The British Council in Cairo, the Australian Embassy in Egypt, and AMIDEAST, this movie showed great success when played to teenagers who both enjoyed watching the movie and benefited from the Pre and Post ESL activities.

Note: the movie was edited, made shorter and English subtitles are added.

The movie took place on November 1st at 5:00 PM in the High School Auditorium.

- At 5:00 PM a welcome note was announced among the students and the ELP teachers.
- The Movie Night administrator shared the Movie Night Plan with the students.
- The Pre movie videos and ESL activities were conducted with the administration of the ELP teachers as well as the Movie Night administrator.
- At approximately 6:30 PM, the movie started playing.
- The Post movie ESL activities were conducted with the administration of the ELP teachers as well as the Movie Night administrator.

The students showed much interest and appreciation to the event. The mentioned that it helped them to learn and practice English through a nontraditional regular context.

STEM GOT TALENT

The STEM GOT TALENT idea aimed at honoring Grade 11 students in both Oct. and Ma'ady schools, Conversation level, for their hard efforts during the course and serving as the official Graduation Ceremony. The students' energetic attitude and creative and none traditional ideas inspired Grade 11 teachers and administration with the idea. One of the ELP teachers experimented the validity of the anticipated idea by running full classes in the schools back yards. Many students showed variable great talents in Poetry, debates, and role plays in English.

The students were announced with the event and requested to fill in the attendance form; as performers or attendees. Additionally, the performers listed the talents they were planning to present in the event.

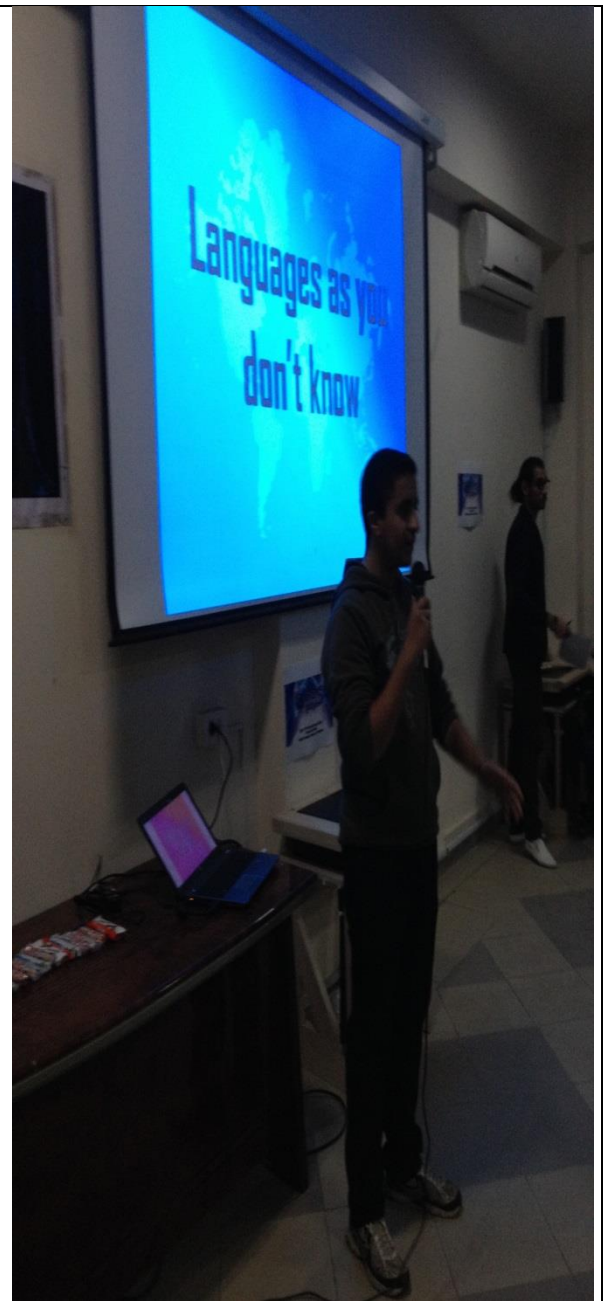
To engage more STEM students in the planning procedures, a competition was announced among the STEM students to design the event banner or flyer. Many of them were received and the best banner was printed out and used for the event.



The event started with welcoming for their commitment, hard work, and progression during the course. The students of each class nominated a class representative to share a “Thank You” Note to their class teacher. The performers, 56 students, came on the stage to share their talents; Role Plays, Playing Music, Acting, Singing, Beatboxing, TEDTalks, Speeches, Brain Teasing, Acting, Poetry, Magic Shows, and Stand Up Comedy.

The event was quite successful in both schools and the students asked for running another one by the end of the upcoming semester.

Pictures



12. ELP Support Services to grade 12 STEM Students and Teachers

I. ACT Students Classes

ACT is a requirement for the STEM students to be able to join college. The ELP was requested to provide support to Grade 3 students in October school as the ACT, as a proficiency test, accounts for 30% of the students' total grade. The ELP ran one ACT Students Support Class to October STEM school and another one to Ma'ady STEM school. ELP experienced teachers were assigned to support the 40 students in both schools for the ACT exam in Oct. and Dec.. The ACT tutoring preparation included strategies and sample questions for each part of the test; Reading and English. The teachers have met with the students in each school three times. The students' attendance was high and punctual along the training period. Fortunately, most of the students were keen enough to attend the three sessions.

II. Test Preparatory ELP Support Proposal

The Grade 12 STEM students have frequent requests for support in test preparation as a fundamental requirement for undergraduate schools admission. Accordingly, the ELP is proposing a support plan targeting both the STEM English teachers as well as Grade 12 students. The proposed plan aims at training the STEM English teachers on the Test Preparatory techniques and strategies in order to take the lead and provide the anticipated academic support for the STEM students upon request in the future.

Suggested Procedure:

1. STEM English teachers attend a one-day-training of Test Prep; ACT, TOEFL, IELTS, techniques, conducted by ELP trainers.
2. ELP trainers run one full Test Prep course to STEM students (9 hrs).
3. STEM English teachers observe the course to gain an understanding of how curriculum is implemented in a time-effective, participatory manner.
4. STEM English teachers run similar courses, with ELP trainers giving support when needed.

ACT STEM Schools Teachers Orientation and Students Training

	Task	Date	Duration
1.	ACT Teacher orientation and training for October STEM School English Teachers	September 15 th , 2014	2 hours
2.	October STEM School students ACT Training	October 19 th , 20 th , 22 nd ,	9 hours

	delivered by ELP trainers and observed by STEM teachers)	2014	
3.	ACT Teacher make up orientation and training for October STEM School English Teachers	November 16 th , 2014	2 hours
4.	Maady STEM School students ACT Training delivered by ELP trainers and observed by STEM School English teachers.	Nov. 25 th & 30 th 2014	7 : 9 hours
5.	STEM Schools Students Training delivered by STEM school English Teachers.	December 1 st , 2 nd , 3 rd , 2014	Up to the school

Annex B: Training Report

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
STEM Unit Workshop				
Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	1-Oct-14	8
Hussein Mahmoud Hussein Shehata	Counsellor of Math	MOE	1-Oct-14	8
Mohamed Osama Zeid Mahmoud Shre	Former Counsellor of Math	MOE	1-Oct-14	8
Sadaka El Dardir Mohamed Ali	Physics Supervisor	MOE	1-Oct-14	8
Elham Ahmed Ibrahim Ibrahim	Counsellor of Science	MOE	1-Oct-14	8
Shadia Ahmed Sedeek	Biology Supervisor	MOE	1-Oct-14	8
Ahmed El Saeid Shalaby	Counselor of Arabic	MOE	1-Oct-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	1-Oct-14	8
Mohamed Kamal Mohamed El Shazly	Chemistry Expert	MOE	1-Oct-14	8
Magdy Abdel Fattah Shaban El Safty	Math Expert/Alex	MOE	1-Oct-14	8
Osama Gaber Abdel Hafez Hamdy	Math Expert/Alex	MOE	1-Oct-14	8
Rashad Ramadan	English Counselor	MOE	1-Oct-14	8
Lamloum Mousa Touny Mousa	General Director	MOE	1-Oct-14	8
Mohamed Farouk Mohamed	Math Expert	MOE	1-Oct-14	8
Mona Mahmoud Mousa Abbas	Chemistry Expert	MOE	1-Oct-14	8
Nahed Gamal El Deen Abdel Mawgoud	Biology Expert	MOE	1-Oct-14	8
Eman Mostafa Zayloul	French Expert	MOE	1-Oct-14	8
Gehan Hassanein	French Expert	MOE	1-Oct-14	8
Naima Ali Abdel Aziz	German Consultant	MOE	1-Oct-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	1-Oct-14	8
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	1-Oct-14	8
Hanan Abou Alabbass	Biology Curriculum Expert	CCIMD	1-Oct-14	8
Saher Ibrahim	Chemistry Expert	CCIMD	1-Oct-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	1-Oct-14	8
Mohamed Aboul Fottoh	Professor	NCEEE	1-Oct-14	8
Emad Abdel Kader	Foreign Affairs	PAT	1-Oct-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Hala Ahmed	Researcher	PAT	1-Oct-14	8
Mohamed Samir Abdel Moez	Professor - Faculty of Education/Ch	University Professors	1-Oct-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	1-Oct-14	8
Hamada Ahmed Fahmy	English Teacher	October School	1-Oct-14	8
Mahmoud Abbass Ibrahim	Chemistry Teachers	October School	1-Oct-14	8
Mei Gamal El-Din	Principal	Ma'adi School	1-Oct-14	8
Amany Abdel Aziz	Researcher/Physics	NCERD	1-Oct-14	8
Amal El Shahat	Researcher/Math	NCERD	1-Oct-14	8

STEM Unit Workshop

Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	15-Oct-14	8
Hussein Mahmoud Hussein Shehata	Counsellor of Math	MOE	15-Oct-14	8
Mohamed Osama Zeid Mahmoud Shre	Former Counsellor of Math	MOE	15-Oct-14	8
Sadaka El Dardir Mohamed Ali	Physics Supervisor	MOE	15-Oct-14	8
Elham Ahmed Ibrahim Ibrahim	Counsellor of Science	MOE	15-Oct-14	8
Shadia Ahmed Sedeek	Biology Supervisor	MOE	15-Oct-14	8
Ahmed El Saeid Shalaby	Counselor of Arabic	MOE	15-Oct-14	8
Youssry Fouad Saweris Mina	Physics Supervisor	MOE	15-Oct-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	15-Oct-14	8
Mohamed Kamal Mohamed El Shazly	Chemistry Expert	MOE	15-Oct-14	8
Magdy Abdel Fattah Shaban El Safty	Math Expert/Alex	MOE	15-Oct-14	8
Osama Gaber Abdel Hafez Hamdy	Math Expert/Alex	MOE	15-Oct-14	8
Rashad Ramadan	English Counselor	MOE	15-Oct-14	8
Lamloum Mousa Touny Mousa	General Director	MOE	15-Oct-14	8
Mohamed Farouk Mohamed	Math Expert	MOE	15-Oct-14	8
Mona Mahmoud Mousa Abbas	Chemistry Expert	MOE	15-Oct-14	8
Nahed Gamal El Deen Abdel Mawgoud	Biology Expert	MOE	15-Oct-14	8
Ola Mostafa	Counselor of French	MOE	15-Oct-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Eman Mostafa Zayloul	French Expert	MOE	15-Oct-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	15-Oct-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	15-Oct-14	5
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	15-Oct-14	5
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	15-Oct-14	8
Hanan Abou Alabbass	Biology Curriculum Expert	CCIMD	15-Oct-14	8
Saher Ibrahim	Chemistry Expert	CCIMD	15-Oct-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	15-Oct-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	15-Oct-14	5
Mohamed Aboul Fottoh	Professor	NCEEE	15-Oct-14	8
Emad Abdel Kader	Foreign Affairs	PAT	15-Oct-14	8
Mohamed Samir Abdel Moez	Professor - Faculty of Education/Ch	University Professors	15-Oct-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	15-Oct-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	15-Oct-14	5
Mahmoud Abbass Ibrahim	Chemistry Teachers	October School	15-Oct-14	5
Taghreed Fawzy Mohamed Abdellatif	Psychiatric	Ma'adi School	15-Oct-14	5
Mei Gamal El-Din	Principal	Ma'adi School	15-Oct-14	8
Mei Gamal El-Din	Principal	Ma'adi School	15-Oct-14	5
Amany Abdel Aziz	Researcher/Physics	NCERD	15-Oct-14	5
Amany Abdel Aziz	Researcher/Physics	NCERD	15-Oct-14	8
Amal El Shahat	Researcher/Math	NCERD	15-Oct-14	8
Amal El Shahat	Researcher/Math	NCERD	15-Oct-14	5

STEM Unit Workshop - Extra-Curricular Committee

Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	19-Oct-14	3
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	19-Oct-14	3
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	19-Oct-14	3
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	19-Oct-14	3

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Amany Abdel Aziz	Researcher/Physics	NCERD	19-Oct-14	3
Amal El Shahat	Researcher/Math	NCERD	19-Oct-14	3
STEM Unit Workshop				
Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	22-Oct-14	8
Hussein Mahmoud Hussein Shehata	Counsellor of Math	MOE	22-Oct-14	8
Mohamed Osama Zeid Mahmoud Shre	Former Counsellor of Math	MOE	22-Oct-14	8
Sadaka El Dardir Mohamed Ali	Physics Supervisor	MOE	22-Oct-14	8
Salah Ismail Ahmed	Math Supervisor	MOE	22-Oct-14	8
Youssry Fouad Saweris Mina	Physics Supervisor	MOE	22-Oct-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	22-Oct-14	8
Mohamed Kamal Mohamed El Shazly	Chemistry Expert	MOE	22-Oct-14	8
Magdy Abdel Fattah Shaban El Safty	Math Expert/Alex	MOE	22-Oct-14	8
Osama Gaber Abdel Hafez Hamdy	Math Expert/Alex	MOE	22-Oct-14	8
Lamloum Mousa Touny Mousa	General Director	MOE	22-Oct-14	8
Mohamed Farouk Mohamed	Math Expert	MOE	22-Oct-14	8
Mona Mahmoud Mousa Abbas	Chemistry Expert	MOE	22-Oct-14	8
Nahed Gamal El Deen Abdel Mawgoud	Biology Expert	MOE	22-Oct-14	8
Nabil Youssef Othman	Training Manager	MOE	22-Oct-14	8
Wael Yehia Shoukralla	Deputy Training Manager	MOE	22-Oct-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	22-Oct-14	8
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	22-Oct-14	8
Hanan Abou Alabbass	Biology Curriculum Expert	CCIMD	22-Oct-14	8
Saher Ibrahim	Chemistry Expert	CCIMD	22-Oct-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	22-Oct-14	8
Mohamed Aboul Fottoh	Professor	NCEEE	22-Oct-14	8
Emad Abdel Kader	Foreign Affairs	PAT	22-Oct-14	8
Hala Ahmed	Researcher	PAT	22-Oct-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	22-Oct-14	8
Hamada Ahmed Fahmy	English Teacher	October School	22-Oct-14	8
Mei Gamal El-Din	Principal	Ma'adi School	22-Oct-14	8
Amany Abdel Aziz	Researcher/Physics	NCERD	22-Oct-14	8
Amal El Shahat	Researcher/Math	NCERD	22-Oct-14	8

STEM Unit Workshop

Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	5-Nov-14	8
Hussein Mahmoud Hussein Shehata	Counsellor of Math	MOE	5-Nov-14	8
Mohamed Osama Zeid Mahmoud Shre	Former Counsellor of Math	MOE	5-Nov-14	8
Sadaka El Dardir Mohamed Ali	Physics Supervisor	MOE	5-Nov-14	8
Salah Ismail Ahmed	Math Supervisor	MOE	5-Nov-14	8
Elham Ahmed Ibrahim Ibrahim	Counsellor of Science	MOE	5-Nov-14	8
Shadia Ahmed Sedeek	Biology Supervisor	MOE	5-Nov-14	8
Youssry Fouad Saweris Mina	Physics Supervisor	MOE	5-Nov-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	5-Nov-14	8
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Mohamed Farouk Mohamed	Math Expert	MOE	5-Nov-14	8
Mona Mahmoud Mousa Abbas	Chemistry Expert	MOE	5-Nov-14	8
Nabil Youssef Othman	Training Manager	MOE	5-Nov-14	8
Wael Yehia Shoukralla	Deputy Training Manager	MOE	5-Nov-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	5-Nov-14	8
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	5-Nov-14	8
Hanan Abou Alabbass	Biology Curriculum Expert	CCIMD	5-Nov-14	8
Saher Ibrahim	Chemistry Expert	CCIMD	5-Nov-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	5-Nov-14	8
Mohamed Aboul Fottoh	Professor	NCEEE	5-Nov-14	8
Emad Abdel Kader	Foreign Affairs	PAT	5-Nov-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	5-Nov-14	8
Hamada Ahmed Fahmy	English Teacher	October School	5-Nov-14	8
Mei Gamal El-Din	Principal	Ma'adi School	5-Nov-14	8
Amany Abdel Aziz	Researcher/Physics	NCERD	5-Nov-14	8
Amal El Shahat	Researcher/Math	NCERD	5-Nov-14	8

STEM Unit Workshop - Extra-Curricular Committee

Lamloum Mousa Touny Mousa	General Director	MOE	16-Nov-14	5
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	16-Nov-14	5
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	16-Nov-14	5
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	16-Nov-14	5
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	16-Nov-14	5
Hamada Ahmed Fahmy	English Teacher	October School	16-Nov-14	5
Mahmoud Abbass Ibrahim	Chemistry Teachers	October School	16-Nov-14	5
Mei Gamal El-Din	Principal	Ma'adi School	16-Nov-14	5
Amany Abdel Aziz	Researcher/Physics	NCERD	16-Nov-14	5
Amal El Shahat	Researcher/Math	NCERD	16-Nov-14	5

STEM Unit Workshop

Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	19-Nov-14	8
Hussein Mahmoud Hussein Shehata	Counsellor of Math	MOE	19-Nov-14	8
Mohamed Osama Zeid Mahmoud Shre	Former Counsellor of Math	MOE	19-Nov-14	8
Sadaka El Dardir Mohamed Ali	Physics Supervisor	MOE	19-Nov-14	8
Salah Ismail Ahmed	Math Supervisor	MOE	19-Nov-14	8
Elham Ahmed Ibrahim Ibrahim	Counsellor of Science	MOE	19-Nov-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Shadia Ahmed Sedeek	Biology Supervisor	MOE	19-Nov-14	8
Ahmed El Saeid Shalaby	Counselor of Arabic	MOE	19-Nov-14	8
Ibraheem Metaw Ahmed	French Supervisor	MOE	19-Nov-14	8
Youssry Fouad Saweris Mina	Physics Supervisor	MOE	19-Nov-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	19-Nov-14	8
Mohamed Kamal Mohamed El Shazly	Chemistry Expert	MOE	19-Nov-14	8
Ahmed Zakaria Al Sayed	Biology Expert	MOE	19-Nov-14	8
Magdy Abdel Fattah Shaban El Safty	Math Expert/Alex	MOE	19-Nov-14	8
Osama Gaber Abdel Hafez Hamdy	Math Expert/Alex	MOE	19-Nov-14	8
Rashad Ramadan	English Counselor	MOE	19-Nov-14	8
Lamloum Mousa Touny Mousa	General Director	MOE	19-Nov-14	8
Mohamed Farouk Mohamed	Math Expert	MOE	19-Nov-14	8
Mona Mahmoud Mousa Abbas	Chemistry Expert	MOE	19-Nov-14	8
Nahed Gamal El Deen Abdel Mawgoud	Biology Expert	MOE	19-Nov-14	8
Naima Ali Abdel Aziz	German Consultant	MOE	19-Nov-14	8
Yehia Abou Taleb	Counselor	MOE	19-Nov-14	8
Wafaa Abbas Mohamed	Inspector de Francias	MOE	19-Nov-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	19-Nov-14	8
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	19-Nov-14	8
Saher Ibrahim	Chemistry Expert	CCIMD	19-Nov-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	19-Nov-14	8
Mohamed Aboul Fottoh	Professor	NCEEE	19-Nov-14	8
Emad Abdel Kader	Foreign Affairs	PAT	19-Nov-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	19-Nov-14	8
Hamada Ahmed Fahmy	English Teacher	October School	19-Nov-14	8
Mei Gamal El-Din	Principal	Ma'adi School	19-Nov-14	8
Amal El Shahat	Researcher/Math	NCERD	19-Nov-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
STEM Unit Workshop				
Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	26-Nov-14	8
Hussein Mahmoud Hussein Shehata	Counsellor of Math	MOE	26-Nov-14	8
Mohamed Osama Zeid Mahmoud Shre	Former Counsellor of Math	MOE	26-Nov-14	8
Sadaka El Dardir Mohamed Ali	Physics Supervisor	MOE	26-Nov-14	8
Salah Ismail Ahmed	Math Supervisor	MOE	26-Nov-14	8
Shadia Ahmed Sedeek	Biology Supervisor	MOE	26-Nov-14	8
Ibraheem Metaw Ahmed	French Supervisor	MOE	26-Nov-14	8
Youssry Fouad Saweris Mina	Physics Supervisor	MOE	26-Nov-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	26-Nov-14	8
Mohamed Kamal Mohamed El Shazly	Chemistry Expert	MOE	26-Nov-14	8
Ahmed Zakaria Al Sayed	Biology Expert	MOE	26-Nov-14	8
Magdy Abdel Fattah Shaban El Safty	Math Expert/Alex	MOE	26-Nov-14	8
Osama Gaber Abdel Hafez Hamdy	Math Expert/Alex	MOE	26-Nov-14	8
Lamloum Mousa Touny Mousa	General Director	MOE	26-Nov-14	8
Mona Mahmoud Mousa Abbas	Chemistry Expert	MOE	26-Nov-14	8
Nahed Gamal El Deen Abdel Mawgoud	Biology Expert	MOE	26-Nov-14	8
Wafaa Abbas Mohamed	Inspector de Francias	MOE	26-Nov-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	26-Nov-14	8
Mohamed Aboul Fottoh	Professor	NCEEE	26-Nov-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	26-Nov-14	8
Hamada Ahmed Fahmy	English Teacher	October School	26-Nov-14	8
Ahmed Hassan Aqrab	Chemistry Teacher	October School	26-Nov-14	8
Mei Gamal El-Din	Principal	Ma'adi School	26-Nov-14	8
Amany Abdel Aziz	Researcher/Physics	NCERD	26-Nov-14	8

Fab Lab Training

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Abdo Metwally Abdel Tawab	Education Specialist	TDC	2-Dec-14	24
Badr Eldin Sebaey Zaki	Section Manager	TDC	2-Dec-14	24
Fathia Khairy Yousef	e-content Manager	TDC	2-Dec-14	24
Maher Wageh Sarofien	Graphic Section Manager	TDC	2-Dec-14	24
Manal Ahmed El Gendy	Section Manager	TDC	2-Dec-14	24
Ahmed Zikry Abdel Khalek	Background system	TDC	2-Dec-14	24
Safinaz Ahmed Bayoumi	Section Manager	TDC	2-Dec-14	24
Mohamed Abdel Naby Abdalallah	Graphic Specialist	TDC	2-Dec-14	24

STEM Unit Workshop

Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	3-Dec-14	8
Shadia Ahmed Sedeek	Biology Supervisor	MOE	3-Dec-14	8
Ibraheem Metaw Ahmed	French Supervisor	MOE	3-Dec-14	8
Youssry Fouad Saweris Mina	Physics Supervisor	MOE	3-Dec-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	3-Dec-14	8
Mohamed Kamal Mohamed El Shazly	Chemistry Expert	MOE	3-Dec-14	8
Ahmed Zakaria Al Sayed	Biology Expert	MOE	3-Dec-14	8
Magdy Abdel Fattah Shaban El Safty	Math Expert/Alex	MOE	3-Dec-14	8
Osama Gaber Abdel Hafez Hamdy	Math Expert/Alex	MOE	3-Dec-14	8
Lamloum Mousa Touny Mousa	General Director	MOE	3-Dec-14	8
Nahed Gamal El Deen Abdel Mawgoud	Biology Expert	MOE	3-Dec-14	8
Dina Mohamed Sultan	Counselor of French	MOE	3-Dec-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	3-Dec-14	8
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	3-Dec-14	8
Hanan Abou Alabbass	Biology Curriculum Expert	CCIMD	3-Dec-14	8
Saher Ibrahim	Chemistry Expert	CCIMD	3-Dec-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	3-Dec-14	8
Mohamed Aboul Fottoh	Professor	NCEEE	3-Dec-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Emad Abdel Kader	Foreign Affairs	PAT	3-Dec-14	8
Hala Ahmed	Researcher	PAT	3-Dec-14	8
Ayman Mohamed Senosy	IT Specialist	PAT	3-Dec-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	3-Dec-14	8
Hamada Ahmed Fahmy	English Teacher	October School	3-Dec-14	8
Mei Gamal El-Din	Principal	Ma'adi School	3-Dec-14	8
Amany Abdel Aziz	Researcher/Physics	NCERD	3-Dec-14	8
Amal El Shahat	Researcher/Math	NCERD	3-Dec-14	8

Capstone Leaders

Hesham Abdelrazek	Social Studies Teacher	October School	4-Dec-14	8
Israa Ali Mohamed	Biology Teacher	October School	4-Dec-14	8
Mohamed Fawzy Said	Math Teacher	October School	4-Dec-14	8
Hamada Ahmed Fahmy	English Teacher	October School	4-Dec-14	8
Ahmed Tawfiq	CAPSTONE Teacher	October School	4-Dec-14	8
Eman Hosny Zian	Biology Teacher	Ma'adi School	4-Dec-14	8
Mohy El deen Abdo Mohamed	Social Studies Teacher	Ma'adi School	4-Dec-14	8
Mohamed Ali El Nagdi	English Teacher	Ma'adi School	4-Dec-14	8
May Eldardiry	Fab Lab Manager/WL	Ma'adi School	4-Dec-14	8
Mei Gamal El-Din	Principal	Ma'adi School	4-Dec-14	8

STEM Unit Workshop

Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	17-Dec-14	8
Hussein Mahmoud Hussein Shehata	Counsellor of Math	MOE	17-Dec-14	8
Mohamed Osama Zeid Mahmoud Shre	Former Counsellor of Math	MOE	17-Dec-14	8
Shadia Ahmed Sedeek	Biology Supervisor	MOE	17-Dec-14	8
Youssry Fouad Saweris Mina	Physics Supervisor	MOE	17-Dec-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	17-Dec-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Mohamed Kamal Mohamed El Shazly	Chemistry Expert	MOE	17-Dec-14	8
Magdy Abdel Fattah Shaban El Safty	Math Expert/Alex	MOE	17-Dec-14	8
Osama Gaber Abdel Hafez Hamdy	Math Expert/Alex	MOE	17-Dec-14	8
Lamloum Mousa Touny Mousa	General Director	MOE	17-Dec-14	8
Mohamed Farouk Mohamed	Math Expert	MOE	17-Dec-14	8
Nahed Gamal El Deen Abdel Mawgoud	Biology Expert	MOE	17-Dec-14	8
Dina Mohamed Sultan	Counselor of French	MOE	17-Dec-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	17-Dec-14	8
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	17-Dec-14	8
Hanan Abou Alabbass	Biology Curriculum Expert	CCIMD	17-Dec-14	8
Saher Ibrahim	Chemistry Expert	CCIMD	17-Dec-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	17-Dec-14	8
Mohamed Aboul Fottoh	Professor	NCEEE	17-Dec-14	8
Emad Abdel Kader	Foreign Affairs	PAT	17-Dec-14	8
Hala Ahmed	Researcher	PAT	17-Dec-14	8
Ayman Mohamed Senosy	IT Specialist	PAT	17-Dec-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	17-Dec-14	8
Hamada Ahmed Fahmy	English Teacher	October School	17-Dec-14	8
Mei Gamal El-Din	Principal	Ma'adi School	17-Dec-14	8
Amany Abdel Aziz	Researcher/Physics	NCERD	17-Dec-14	8
Amal El Shahat	Researcher/Math	NCERD	17-Dec-14	8

STEM Unit Workshop

Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	24-Dec-14	8
Hussein Mahmoud Hussein Shehata	Counsellor of Math	MOE	24-Dec-14	8
Mohamed Osama Zeid Mahmoud Shre	Former Counsellor of Math	MOE	24-Dec-14	8
Sadaka El Dardir Mohamed Ali	Physics Supervisor	MOE	24-Dec-14	8
Elham Ahmed Ibrahim Ibrahim	Counsellor of Science	MOE	24-Dec-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Youssry Fouad Saweris Mina	Physics Supervisor	MOE	24-Dec-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	24-Dec-14	8
Mohamed Kamal Mohamed El Shazly	Chemistry Expert	MOE	24-Dec-14	8
Sherif Farghaly Mohamed	Biology Supervisor	MOE	24-Dec-14	8
Ahmed Zakaria Al Sayed	Biology Expert	MOE	24-Dec-14	8
Magdy Abdel Fattah Shaban El Safty	Math Expert/Alex	MOE	24-Dec-14	8
Osama Gaber Abdel Hafez Hamdy	Math Expert/Alex	MOE	24-Dec-14	8
Rashad Ramadan	English Counselor	MOE	24-Dec-14	8
Lamloum Mousa Touny Mousa	General Director	MOE	24-Dec-14	8
Mohamed Farouk Mohamed	Math Expert	MOE	24-Dec-14	8
Nahed Gamal El Deen Abdel Mawgoud	Biology Expert	MOE	24-Dec-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	24-Dec-14	8
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	24-Dec-14	8
Hanan Abou Alabbass	Biology Curriculum Expert	CCIMD	24-Dec-14	8
Saher Ibrahim	Chemistry Expert	CCIMD	24-Dec-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	24-Dec-14	8
Mohamed Aboul Fottoh	Professor	NCEEE	24-Dec-14	8
Emad Abdel Kader	Foreign Affairs	PAT	24-Dec-14	8
Ayman Mohamed Senosy	IT Specialist	PAT	24-Dec-14	8
Mohamed Samir Abdel Moez	Professor - Faculty of Education/Ch	University Professors	24-Dec-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	24-Dec-14	8
Amany Abdel Aziz	Researcher/Physics	NCERD	24-Dec-14	8
Amal El Shahat	Researcher/Math	NCERD	24-Dec-14	8

Capstone Evaluation (External Evaluators)

Khaled Mohamed Sayed	Assessment Researcher	NCEEE	30-Dec-14	2
Mohamed Magdy Abdel Wahab	Director of Space R&D center & Pr	University Professors	30-Dec-14	2
Amr Abdel Khalek	Lecturer-environmental-Cairo Univ	University Professors	30-Dec-14	2

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Atef Abel Moneem Ali	Lecturer-Biology-Cairo University	University Professors	30-Dec-14	2
Mohamed Adel Kadry	Lecturer Biology-Cairo University	University Professors	30-Dec-14	2
Amira Elbortokaly	Teaching Assistant-Architecture- Ca	University Professors	30-Dec-14	2
Farida Waheed	TA Architecture-Cairo University	University Professors	30-Dec-14	2
Mahmoud Magdi Mohamed Mahmou	TA Engineering-Cairo University	University Professors	30-Dec-14	2
Muhammad Hamdy	RA, Physics	University Professors	30-Dec-14	2
Safwat Hassan	TA Civil Engineering-Cairo Universit	University Professors	30-Dec-14	2
Tamer Naseef	Ass. Professor Electrical Engineer-	University Professors	30-Dec-14	2
Azza Mohamed Al Amir	Professor-Head of Department-Cair	University Professors	30-Dec-14	2
Esraa Ahmed El-Sherbini	TA Civil Engineering-MUST Universi	University Professors	30-Dec-14	2
Ramy Kamal Badwy	TA Engineering Urban Designe-Cair	University Professors	30-Dec-14	2
Mahmoud Amer Ahmed	TA Engineering-Cairo University	University Professors	30-Dec-14	2
Mohamed Fouad Aly	Professor Geology-Cairo University	University Professors	30-Dec-14	2
Mohamed Seif El Nasr	MD, Lecturer Medicine-Cairo Unive	University Professors	30-Dec-14	2
Mostafa Shawky Abdel Moez Hussien	TA Engineering-Cairo University	University Professors	30-Dec-14	2
Omar Alfarouk Rabiee	Lecturer Microbiology-Ain Shams U	University Professors	30-Dec-14	2
Omar Gamal Farag	TA Engineering-Cairo University	University Professors	30-Dec-14	2
Amany Abdel Aziz	Researcher/Physics	NCERD	30-Dec-14	2
Amal El Shahat	Researcher/Math	NCERD	30-Dec-14	2

STEM Unit Workshop

Ali Abdel Ghani Korime Mahmoud	Math Expert	MOE	31-Dec-14	8
Hussein Mahmoud Hussein Shehata	Counsellor of Math	MOE	31-Dec-14	8
Mohamed Osama Zeid Mahmoud Shre	Former Counsellor of Math	MOE	31-Dec-14	8
Youssry Fouad Saweris Mina	Physics Supervisor	MOE	31-Dec-14	8
Hisham Abdel Hakim Kamel Darwish	Geology Expert	MOE	31-Dec-14	8
Magdy Abdel Fattah Shaban El Safty	Math Expert/Alex	MOE	31-Dec-14	8
Osama Gaber Abdel Hafez Hamdy	Math Expert/Alex	MOE	31-Dec-14	8

Training Events During October 2014 - December 2014

Name	Title	Organization	Start Date	Training Hours
Dina Mohamed Sultan	Counselor of French	MOE	31-Dec-14	8
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert	CCIMD	31-Dec-14	8
Eman Sayed Ramadan Mohamed	Curriculum Expert	CCIMD	31-Dec-14	8
Hanan Abou Alabbass	Biology Curriculum Expert	CCIMD	31-Dec-14	8
Saher Ibrahim	Chemistry Expert	CCIMD	31-Dec-14	8
Khaled Mohamed Sayed	Assessment Researcher	NCEEE	31-Dec-14	8
Mohamed Aboul Fottoh	Professor	NCEEE	31-Dec-14	8
Emad Abdel Kader	Foreign Affairs	PAT	31-Dec-14	8
Mohamed Ahmed Abou Leila	Professor - Ain Shams University	University Professors	31-Dec-14	8
Mohamed Samir Abdel Moez	Professor - Faculty of Education/Ch	University Professors	31-Dec-14	8
Ali El-Sayed Abbas	Geological Engineering Professor/S	University Professors	31-Dec-14	8
Amany Abdel Aziz	Researcher/Physics	NCERD	31-Dec-14	8
Amal El Shahat	Researcher/Math	NCERD	31-Dec-14	8

Training Events/Hours During October 2014 - December 2014**Course Name****Training Hours****MOE**

Ali Abdel Ghani Korime Mahmoud

Math Expert

STEM Unit Workshop	1-Oct-14	8
STEM Unit Workshop	15-Oct-14	8
STEM Unit Workshop	22-Oct-14	8
STEM Unit Workshop	5-Nov-14	8
STEM Unit Workshop	19-Nov-14	8
STEM Unit Workshop	26-Nov-14	8
STEM Unit Workshop	3-Dec-14	8
STEM Unit Workshop	17-Dec-14	8
STEM Unit Workshop	24-Dec-14	8
STEM Unit Workshop	31-Dec-14	8

80

Hussein Mahmoud Hussein Shehata

Counsellor of Math

STEM Unit Workshop	1-Oct-14	8
STEM Unit Workshop	15-Oct-14	8
STEM Unit Workshop	22-Oct-14	8
STEM Unit Workshop	5-Nov-14	8
STEM Unit Workshop	19-Nov-14	8
STEM Unit Workshop	26-Nov-14	8
STEM Unit Workshop	17-Dec-14	8
STEM Unit Workshop	24-Dec-14	8
STEM Unit Workshop	31-Dec-14	8

72

Mohamed Osama Zeid Mahmoud Shreif

Former Counsellor of Math

STEM Unit Workshop	1-Oct-14	8
STEM Unit Workshop	15-Oct-14	8
STEM Unit Workshop	22-Oct-14	8
STEM Unit Workshop	5-Nov-14	8
STEM Unit Workshop	19-Nov-14	8
STEM Unit Workshop	26-Nov-14	8
STEM Unit Workshop	17-Dec-14	8
STEM Unit Workshop	24-Dec-14	8
STEM Unit Workshop	31-Dec-14	8

72

Sadaka El Dardir Mohamed Ali

Physics Supervisor

STEM Unit Workshop	1-Oct-14	8
STEM Unit Workshop	15-Oct-14	8
STEM Unit Workshop	22-Oct-14	8

Training Events/Hours During October 2014 - December 2014

Course Name		Training Hours	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	24-Dec-14	8	
			56
Salah Ismail Ahmed	Math Supervisor		
STEM Unit Workshop	22-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
			32
Elham Ahmed Ibrahim Ibrahim	Counsellor of Science		
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	24-Dec-14	8	
			40
Shadia Ahmed Sedeek	Biology Supervisor		
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	
			56
Ahmed El Saeid Shalaby	Counselor of Arabic		
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	19-Nov-14	8	
			24
Ibraheem Metaw Ahmed	French Supervisor		
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
			24
Youssry Fouad Saweris Mina	Physics Supervisor		
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	22-Oct-14	8	

Training Events/Hours During October 2014 - December 2014

Course Name		Training Hours	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	
STEM Unit Workshop	24-Dec-14	8	
STEM Unit Workshop	31-Dec-14	8	
			72
Hisham Abdel Hakim Kamel Darwish	Geology Expert		
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	22-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	
STEM Unit Workshop	24-Dec-14	8	
STEM Unit Workshop	31-Dec-14	8	
			80
Mohamed Kamal Mohamed El Shazly	Chemistry Expert		
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	22-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	
STEM Unit Workshop	24-Dec-14	8	
			72
Sherif Farghaly Mohamed	Biology Supervisor		
STEM Unit Workshop	24-Dec-14	8	
			8
Ahmed Zakaria Al Sayed	Biology Expert		
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	24-Dec-14	8	
			32

Training Events/Hours During October 2014 - December 2014

Course Name		Training Hours	
Magdy Abdel Fattah Shaban El Safty		Math Expert/Alex	
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	22-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	
STEM Unit Workshop	24-Dec-14	8	
STEM Unit Workshop	31-Dec-14	8	
			80
Osama Gaber Abdel Hafez Hamdy		Math Expert/Alex	
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	22-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	
STEM Unit Workshop	24-Dec-14	8	
STEM Unit Workshop	31-Dec-14	8	
			80
Rashad Ramadan		English Counselor	
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	24-Dec-14	8	
			32
Lamloum Mousa Touny Mousa		General Director	
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	22-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop - Extra-Curricular Committee	16-Nov-14	5	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	

Training Events/Hours During October 2014 - December 2014

Course Name		Training Hours	
STEM Unit Workshop		24-Dec-14	8
			77
Mohamed Farouk Mohamed	Math Expert		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		15-Oct-14	8
STEM Unit Workshop		22-Oct-14	8
STEM Unit Workshop		5-Nov-14	8
STEM Unit Workshop		19-Nov-14	8
STEM Unit Workshop		17-Dec-14	8
STEM Unit Workshop		24-Dec-14	8
			56
Mona Mahmoud Mousa Abbas	Chemistry Expert		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		15-Oct-14	8
STEM Unit Workshop		22-Oct-14	8
STEM Unit Workshop		5-Nov-14	8
STEM Unit Workshop		19-Nov-14	8
STEM Unit Workshop		26-Nov-14	8
			48
Nahed Gamal El Deen Abdel Mawgoud Os	Biology Expert		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		15-Oct-14	8
STEM Unit Workshop		22-Oct-14	8
STEM Unit Workshop		19-Nov-14	8
STEM Unit Workshop		26-Nov-14	8
STEM Unit Workshop		3-Dec-14	8
STEM Unit Workshop		17-Dec-14	8
STEM Unit Workshop		24-Dec-14	8
			64
Ola Mostafa	Counselor of French		
STEM Unit Workshop		15-Oct-14	8
			8
Dina Mohamed Sultan	Counselor of French		
STEM Unit Workshop		3-Dec-14	8
STEM Unit Workshop		17-Dec-14	8
STEM Unit Workshop		31-Dec-14	8
			24
Eman Mostafa Zayloul	French Expert		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		15-Oct-14	8

Training Events/Hours During October 2014 - December 2014

Course Name		Training Hours	
			16
Gehan Hassanein	French Expert		
STEM Unit Workshop		1-Oct-14	8
			8
Naima Ali Abdel Aziz	German Consultant		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		19-Nov-14	8
			16
Nabil Youssef Othman	Training Manager		
STEM Unit Workshop		22-Oct-14	8
STEM Unit Workshop		5-Nov-14	8
			16
Wael Yehia Shoukralla	Deputy Training Manager		
STEM Unit Workshop		22-Oct-14	8
STEM Unit Workshop		5-Nov-14	8
			16
Yehia Abou Taleb	Counselor		
STEM Unit Workshop		19-Nov-14	8
			8
Wafaa Abbas Mohamed	Inspector de Francias		
STEM Unit Workshop		19-Nov-14	8
STEM Unit Workshop		26-Nov-14	8
			16
CCIMD			
Mohamed Mohy El-Din Abdel Salam	Curriculum Expert		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		15-Oct-14	8
STEM Unit Workshop		15-Oct-14	5
STEM Unit Workshop - Extra-Curricular Committee		19-Oct-14	3
STEM Unit Workshop		22-Oct-14	8
STEM Unit Workshop		5-Nov-14	8
STEM Unit Workshop - Extra-Curricular Committee		16-Nov-14	5
STEM Unit Workshop		19-Nov-14	8
STEM Unit Workshop		3-Dec-14	8
STEM Unit Workshop		17-Dec-14	8
STEM Unit Workshop		24-Dec-14	8
STEM Unit Workshop		31-Dec-14	8
			85
Eman Sayed Ramadan Mohamed	Curriculum Expert		

Training Events/Hours During October 2014 - December 2014

Course Name	Training Hours	
STEM Unit Workshop	1-Oct-14	8
STEM Unit Workshop	15-Oct-14	5
STEM Unit Workshop	15-Oct-14	8
STEM Unit Workshop - Extra-Curricular Committee	19-Oct-14	3
STEM Unit Workshop	22-Oct-14	8
STEM Unit Workshop	5-Nov-14	8
STEM Unit Workshop - Extra-Curricular Committee	16-Nov-14	5
STEM Unit Workshop	19-Nov-14	8
STEM Unit Workshop	3-Dec-14	8
STEM Unit Workshop	17-Dec-14	8
STEM Unit Workshop	24-Dec-14	8
STEM Unit Workshop	31-Dec-14	8
		85

Hanan Abou Alabbass

Biology Curriculum Expert

STEM Unit Workshop	1-Oct-14	8
STEM Unit Workshop	15-Oct-14	8
STEM Unit Workshop	22-Oct-14	8
STEM Unit Workshop	5-Nov-14	8
STEM Unit Workshop	3-Dec-14	8
STEM Unit Workshop	17-Dec-14	8
STEM Unit Workshop	24-Dec-14	8
STEM Unit Workshop	31-Dec-14	8
		64

Saher Ibrahim

Chemistry Expert

STEM Unit Workshop	1-Oct-14	8
STEM Unit Workshop	15-Oct-14	8
STEM Unit Workshop	22-Oct-14	8
STEM Unit Workshop	5-Nov-14	8
STEM Unit Workshop	19-Nov-14	8
STEM Unit Workshop	3-Dec-14	8
STEM Unit Workshop	17-Dec-14	8
STEM Unit Workshop	24-Dec-14	8
STEM Unit Workshop	31-Dec-14	8
		72

NCEEE

Khaled Mohamed Sayed

Assessment Researcher

STEM Unit Workshop	1-Oct-14	8
STEM Unit Workshop	15-Oct-14	5
STEM Unit Workshop	15-Oct-14	8

Training Events/Hours During October 2014 - December 2014

Course Name	Training Hours	
STEM Unit Workshop - Extra-Curricular Committee	19-Oct-14	3
STEM Unit Workshop	22-Oct-14	8
STEM Unit Workshop	5-Nov-14	8
STEM Unit Workshop - Extra-Curricular Committee	16-Nov-14	5
STEM Unit Workshop	19-Nov-14	8
STEM Unit Workshop	26-Nov-14	8
STEM Unit Workshop	3-Dec-14	8
STEM Unit Workshop	17-Dec-14	8
STEM Unit Workshop	24-Dec-14	8
Capstone Evaluation (External Evaluators)	30-Dec-14	2
STEM Unit Workshop	31-Dec-14	8

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Mohamed Aboul Fottoh	Professor		
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	22-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	26-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	
STEM Unit Workshop	24-Dec-14	8	
STEM Unit Workshop	31-Dec-14	8	

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Emad Abdel Kader	Foreign Affairs		
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop	22-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	
STEM Unit Workshop	24-Dec-14	8	
STEM Unit Workshop	31-Dec-14	8	

72

Hala Ahmed	Researcher		
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	22-Oct-14	8	

Training Events/Hours During October 2014 - December 2014

Course Name		Training Hours	
STEM Unit Workshop		3-Dec-14	8
STEM Unit Workshop		17-Dec-14	8
			32
Ayman Mohamed Senosy	IT Specialist		
STEM Unit Workshop		3-Dec-14	8
STEM Unit Workshop		17-Dec-14	8
STEM Unit Workshop		24-Dec-14	8
			24

University Professors

Mohamed Ahmed Abou Leila	Professor - Ain Shams Universit		
STEM Unit Workshop		31-Dec-14	8
			8
Mohamed Samir Abdel Moez	Professor - Faculty of Education		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		15-Oct-14	8
STEM Unit Workshop		24-Dec-14	8
STEM Unit Workshop		31-Dec-14	8
			32
Mohamed Magdy Abdel Wahab	Director of Space R&D center &		
Capstone Evaluation (External Evaluators)		30-Dec-14	2
			2
Amr Abdel Khalek	Lecturer-environmental-Cairo U		
Capstone Evaluation (External Evaluators)		30-Dec-14	2
			2
Atef Abel Moneem Ali	Lecturer-Biology-Cairo Universit		
Capstone Evaluation (External Evaluators)		30-Dec-14	2
			2
Mohamed Adel Kadry	Lecturer Biology-Cairo Universit		
Capstone Evaluation (External Evaluators)		30-Dec-14	2
			2
Amira Elbortokaly	Teaching Assistant-Architecture		
Capstone Evaluation (External Evaluators)		30-Dec-14	2
			2
Farida Waheed	TA Architecture-Cairo University		
Capstone Evaluation (External Evaluators)		30-Dec-14	2
			2
Mahmoud Magdi Mohamed Mahmoud	TA Engineering-Cairo University		
Capstone Evaluation (External Evaluators)		30-Dec-14	2
			2

Training Events/Hours During October 2014 - December 2014

Course Name	Training Hours
Muhammad Hamdy	RA, Physics
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Safwat Hassan	TA Civil Engineering-Cairo Unive
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Tamer Naseef	Ass. Professor Electrical Enginee
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Azza Mohamed Al Amir	Professor-Head of Department-
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Esraa Ahmed El-Sherbini	TA Civil Engineering-MUST Univ
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Ramy Kamal Badwy	TA Engineering Urban Designe-C
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Mahmoud Amer Ahmed	TA Engineering-Cairo University
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Mohamed Fouad Aly	Professor Geology-Cairo Univer
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Mohamed Seif El Nasr	MD, Lecturer Medicine-Cairo U
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Mostafa Shawky Abdel Moez Hussien	TA Engineering-Cairo University
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Omar Alfarouk Rabiee	Lecturer Microbiology-Ain Sham
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Omar Gamal Farag	TA Engineering-Cairo University
Capstone Evaluation (External Evaluators)	30-Dec-14 2
Ali El-Sayed Abbas	Geological Engineering Professo
STEM Unit Workshop	1-Oct-14 8
STEM Unit Workshop	15-Oct-14 5

Training Events/Hours During October 2014 - December 2014

Course Name	Training Hours	
STEM Unit Workshop	15-Oct-14	8
STEM Unit Workshop - Extra-Curricular Committee	19-Oct-14	3
STEM Unit Workshop	22-Oct-14	8
STEM Unit Workshop	5-Nov-14	8
STEM Unit Workshop - Extra-Curricular Committee	16-Nov-14	5
STEM Unit Workshop	19-Nov-14	8
STEM Unit Workshop	26-Nov-14	8
STEM Unit Workshop	3-Dec-14	8
STEM Unit Workshop	17-Dec-14	8
STEM Unit Workshop	24-Dec-14	8
STEM Unit Workshop	31-Dec-14	8
		93

October School

Hesham Abdelrazek	Social Studies Teacher		
Capstone Leaders		4-Dec-14	8
			8
Israa Ali Mohamed	Biology Teacher		
Capstone Leaders		4-Dec-14	8
			8
Mohamed Fawzy Said	Math Teacher		
Capstone Leaders		4-Dec-14	8
			8
Hamada Ahmed Fahmy	English Teacher		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		22-Oct-14	8
STEM Unit Workshop		5-Nov-14	8
STEM Unit Workshop - Extra-Curricular Committee		16-Nov-14	5
STEM Unit Workshop		19-Nov-14	8
STEM Unit Workshop		26-Nov-14	8
STEM Unit Workshop		3-Dec-14	8
Capstone Leaders		4-Dec-14	8
STEM Unit Workshop		17-Dec-14	8
			69
Ahmed Tawfiq	CAPSTONE Teacher		
Capstone Leaders		4-Dec-14	8
			8
Mahmoud Abbass Ibrahim	Chemistry Teachers		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		15-Oct-14	5

ECASE Project

Training Events/Hours During October 2014 - December 2014

Course Name		Training Hours	
STEM Unit Workshop - Extra-Curricular Committee		16-Nov-14	5
			18
Ahmed Hassan Agrab	Chemistry Teacher		
STEM Unit Workshop		26-Nov-14	8
			8
Ma'adi School			
Eman Hosny Zian	Biology Teacher		
Capstone Leaders		4-Dec-14	8
			8
Mohy El deen Abdo Mohamed	Social Studies Teacher		
Capstone Leaders		4-Dec-14	8
			8
Mohamed Ali El Nagdi	English Teacher		
Capstone Leaders		4-Dec-14	8
			8
Taghreed Fawzy Mohamed Abdellatif	Psychiatric		
STEM Unit Workshop		15-Oct-14	5
			5
May Eldardiry	Fab Lab Manager/WL		
Capstone Leaders		4-Dec-14	8
			8
Mei Gamal El-Din	Principal		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		15-Oct-14	5
STEM Unit Workshop		15-Oct-14	8
STEM Unit Workshop		22-Oct-14	8
STEM Unit Workshop		5-Nov-14	8
STEM Unit Workshop - Extra-Curricular Committee		16-Nov-14	5
STEM Unit Workshop		19-Nov-14	8
STEM Unit Workshop		26-Nov-14	8
STEM Unit Workshop		3-Dec-14	8
Capstone Leaders		4-Dec-14	8
STEM Unit Workshop		17-Dec-14	8
			82
NCERD			
Amany Abdel Aziz	Researcher/Physics		
STEM Unit Workshop		1-Oct-14	8
STEM Unit Workshop		15-Oct-14	5
STEM Unit Workshop		15-Oct-14	8

Training Events/Hours During October 2014 - December 2014

Course Name	Training Hours	
STEM Unit Workshop - Extra-Curricular Committee	19-Oct-14	3
STEM Unit Workshop	22-Oct-14	8
STEM Unit Workshop	5-Nov-14	8
STEM Unit Workshop - Extra-Curricular Committee	16-Nov-14	5
STEM Unit Workshop	26-Nov-14	8
STEM Unit Workshop	3-Dec-14	8
STEM Unit Workshop	17-Dec-14	8
STEM Unit Workshop	24-Dec-14	8
Capstone Evaluation (External Evaluators)	30-Dec-14	2
STEM Unit Workshop	31-Dec-14	8
		87

Amal El Shahat	Researcher/Math		
STEM Unit Workshop	1-Oct-14	8	
STEM Unit Workshop	15-Oct-14	5	
STEM Unit Workshop	15-Oct-14	8	
STEM Unit Workshop - Extra-Curricular Committee	19-Oct-14	3	
STEM Unit Workshop	22-Oct-14	8	
STEM Unit Workshop	5-Nov-14	8	
STEM Unit Workshop - Extra-Curricular Committee	16-Nov-14	5	
STEM Unit Workshop	19-Nov-14	8	
STEM Unit Workshop	3-Dec-14	8	
STEM Unit Workshop	17-Dec-14	8	
STEM Unit Workshop	24-Dec-14	8	
Capstone Evaluation (External Evaluators)	30-Dec-14	2	
STEM Unit Workshop	31-Dec-14	8	
			87

TDC

Abdo Metwally Abdel Tawab	Education Specialist		
Fab Lab Training	2-Dec-14	24	
			24
Badr Eldin Sebaey Zaki	Section Manager		
Fab Lab Training	2-Dec-14	24	
			24
Fathia Khairy Yousef	e-content Manager		
Fab Lab Training	2-Dec-14	24	
			24
Maher Wageh Sarofien	Graphic Section Manager		
Fab Lab Training	2-Dec-14	24	
			24

Training Events/Hours During October 2014 - December 2014

Course Name		Training Hours	
Manal Ahmed El Gendy	Section Manager		
Fab Lab Training		2-Dec-14	24
			24
Ahmed Zikry Abdel Khalek	Background system		
Fab Lab Training		2-Dec-14	24
			24
Safinaz Ahmed Bayoumi	Section Manager		
Fab Lab Training		2-Dec-14	24
			24
Mohamed Abdel Naby Abdalallah	Graphic Specialist		
Fab Lab Training		2-Dec-14	24
			24

Annex C: PPP Reports

ALFI FOUNDATION EVENT

Cairo, Egypt

Dec. 3rd 2014

This is a very brief review of the Alfi Foundation event held in Cairo Dec. 3rd 2014

REASONS TO ATTEND:

- Networking
- Increase database of potential partners
- Update current database
- Tighten relationship with Alfi Foundation –a major enthusiast of the schools-

OUTCOME:

- Introduced to CitiBank CSR Manager for potential cooperation
- Introduced to Sir. Magdy Yacoub whom we invited to address the students

RECOMMENDATIONS:

- Follow up on CitiBank
- Follow up on Sir. Madgy Yacoub

ACTIONS TO BE TAKEN UPON APPROVAL

CAIRO INNOVATES

Cairo, Egypt

Nov. 19th and 20th 2014

This is a brief review of the Cairo Innovate event

REASONS TO ATTEND:

- Networking specifically with research and technology government organizations in Egypt
 - Event under the auspices of the Academy of Sciences Research and Technology
<http://www.asrt.sci.eg/>
- Check for new topics and trends of interest for students knowledge

OUTCOME:

- Learn about organizations with interest supporting the R&D in Egypt
 - Private - Mohamed Farid Khamis Organization
 - Public - the Academy of Sciences Research and Technology
- Learn about the Egyptian Patent Office
 - Chat with the head of the EGPO – Mr. Aly Oweida
 - Contact available

RECOMMENDATIONS:

- Highly recommend students to attend alike event especially with the presence of public universities supporting R&D
- Contact Mr. Oweida and invite him to address the students on the topic of patenting

ACTIONS TO BE TAKEN UPON APPROVAL

EDUCATION AND SCIENTIFIC RESEARCH PANEL

AUC, Cairo, Egypt

Nov. 16th 2014

This is a very brief review of the education and scientific research panel held in the American University in Cairo main campus

REASONS TO ATTEND:

- Learn the latest updates regarding scientific research national strategy
- Get acquainted with the board of the education and scientific research presidential consultants المجلس الرئاسي الإستشاري للتعليم والبحث العلمي
- Inform the board with STEM schools

OUTCOME:

- Introduced to the board (5 of total 11)
- Exchange contacts with the president of the national research center – Dr. Ashraf Shaalan

ACTIONS:

- Upon approval contact Dr. Ashraf the president of the NRC to visit the school and get a closer idea of the type of research undertaken by the students and their capabilities

FRENCH UNIVERSITY MANAGEMENT DAY

Cairo, Egypt

Dec. 2nd 2014

**This is a very brief review of the French University Management Day held in Cairo
Dec. 2nd 2014**

REASONS TO ATTEND:

- Networking
- Increase database of potential partners

OUTCOME:

- Introduced to Banque Du Cairo senior manager who is very interested and directed us to the corporate affairs manager

RECOMMENDATIONS:

- Proceed with the Banque Du Caire lead

ACTIONS TO BE TAKEN UPON APPROVAL

ICT – INFORMATION AND COMMUNICATION TECHNOLOGY

CONFERENCE AND EXHIBITION

Cairo, Egypt

Nov. 4th – 8th 2014

This is a very brief review of the ICT event held in Cairo

Visited Nov. 5th 2014

REASONS TO ATTEND:

- Trace specific contacts in targeted organizations ex. The CSR Manager of TEDATA
- Networking
- Increase database of potential partners

OUTCOME:

- Introduce the STEM schools to a wide variety of ICT professionals
- Trace specific contacts in targeted organizations
- Open contacts with new potential partners ex. DELL, P&G, Alcatel Lucent, NBE and Xerox

ACTIONS:

- Sent introductory emails to the new potential contacts
 - Alcatel Lucent
 - Dell
 - P&G
 - National Bank of Egypt
 - Xerox
- A follow up email to
 - TEData

INJAZ AND MoE INITIATIVE

ADOPT A SCHOOL

Cairo, Egypt

Oct 28th 2014

This is a very brief review of the event organized by INJAZ to celebrate the success of its 'Adopt a School' initiative with the MoE held in Cairo Oct 28th

REASONS TO ATTEND:

- Networking with MoE personnel
- Increase database of targeted potential partners
- Update current database with more potential partners with interest in the education sector

OUTCOME:

- Learn about the MoE initiatives with different private sector entities
 - 3.000 LE Renovate your classroom and rename it جدد فـ صـ دـ لـ كـ وـ اـ كـ تـ بـ اـ سـ مـ كـ
 - 250.000 LE School in every village مدرسة في كل قرية
 - School in factory/plant مدرسة في المصنع
- Learn about major private sector entities willing and investing in the education sector –Adopt a school initiative-
 - Alcatel Lucent
 - Cargill
 - Exxon Mobil
 - HSBC
 - Mars
 - Suez Cement
- Learn about MoE department responsible of partnerships
 - Randa Halawa – General Manager of community partnerships-

RECOMMENDATIONS:

- Get in contact with the database of organizations currently investing in education – above mentioned list – upon approval of organizations
 - Cost sharing and scholarship proposals

ACTIONS TO BE TAKEN UPON APPROVAL

AUC CAPS OFFICE

Cairo, Egypt

Nov. 1st 2014

This is a very brief review of the AUC CAPS office event held in Cairo Nov. 1st 2014

REASONS TO ATTEND:

- Trace specific contacts in targeted organizations ex. GE
- Networking
- Increase database of potential partners

OUTCOME:

- Introduce the STEM schools to a wide variety of organization professionals
- Trace specific contacts in targeted organizations
- Open contacts with new potential partners

RECOMMENDATIONS:

- Send introductory emails to the new potential contacts
 - Banque Misr
 - Cargill
 - DHL
 - SADKO
 - P&G
 - Mars
 - GM

ACTIONS TO BE TAKEN UPON APPROVAL

Annex D: Meetings Minutes

October 1

A meeting was held at USAID with Jana Wooden, USAID Education Department and AOR for the STEP project implemented by IIE, Hala ElSerafy, and Dina Kafafi DCOP of the STEP project, to discuss the STEP scholarships being offered to the Maadi school students. ECASE wanted to make sure of the criteria for selection, the types of scholarships offered and what number of students may be eligible to travel. It was understood from STEP that 27 students applied already to the advertisement published in Al Ahram newspaper and that the requirements for application are a 90% grade Thanaweya Amma, financial needs, community service and English language score. STEP has worked with the MOE and is in the process of gaining the necessary approvals to work in the schools. ECASE agreed that as soon as the approval is granted by the Ministry to the project, they are welcomed to visit the STEM school in Maadi and deal with the principal there.

October 1

A meeting was held at the Sofitel lobby as a side meeting to ECASE's STEM Unit meeting held earlier that day to gather Hala ElSerafy, Ms. Elham the MOE Science Counselor, Mr. Mamdouh Fadil, ESP COP, Mr. Yasser Youssef, ESP Technical Director to talk about Science Clubs supported by ESP in multiple governorates and their relation to STEM schools. Also, the need for ESP to provide support to both the October and Maadi schools to help them elect a BOT in each school. ESP has had a long experience in the field of supporting Science Clubs and BOTs in schools all over the country. Hala also suggested arranging a visit with Ms. Elham to samples of the nearby Science Clubs to learn more about their activities and how they can assist ECASE in its outreach efforts next school year.

October 12

A Meeting was held at the ECASE office between Hala ElSerafy and Eric Corens to discuss the opening of schools in the three new governorates and selection of teachers. ECASE presented plans for PAT to be more involved and lead the process of teacher's selection. Because our model will be implemented in all five schools as a complete model, similar equipment need to be procured in all schools including a Fab Lab. USAID agreed to use the ACT exam this year (June 2015) until ECASE builds local capacity to develop a University Readiness Test locally.

October 16

Another meeting between Hala ElSerafy and Eric was held to discuss the future of ESP's Science Clubs. Hala promised a workshop soon to plan the future of the Science Clubs and how ECASE will have a role in this. She also pointed the importance of checking on students' achievement after they graduate from the schools and while they are completing their undergraduate studies. Hala also wanted ECASE to make a presentation to the USAID front office to talk about curriculum and assessment, teacher and students' selection, and other project achievements. The attendees also explored the composition of the local STME Unit in the new governorates and that it should include the local PAT representative, Science and Math supervisors selected by the MoE Counselors' offices, GAEB Branch Office representative and Mudireya lead Social Worker. ECASE informed Hala that we are working on presenting a request for an extension and that we are working on the budget to decide if the request will be for a cost or no cost.

November 17

A meeting was held with Hala ElSerafy at the ECASE office to discuss new schools, how to hire teachers and principals, train STEM Unit members and involve an advisory committee on the governorate level. ECASE also indicated the need to include Mr. Mohamed Saad and Mr. Lamoulou as important members of any upcoming visit to the governorates. ECASE mentioned that it is ready to start recruiting and that its collaboration with PAT needs to be blessed by PAT's Head, Dr. Magdy. ECASE also informed Hala that TDC is ready to join with eight candidates for Fab Lab training and that coordination is taking place with TDC to be part of the e STEM Online and Google Drive transfer to MoE. ECASE requested Hala to arrange for a visit to Science Clubs nearby to learn about ESP's success story there and see how it can be extended through ECASE. The attendees investigated the direction of designing the URT, how it will start, whether ECASE is able to bid this service soon and if there are interested parties to bid. The agreement was to use ACT in June with a possibility to pilot a first trial of a URT then. This will well position the MoE to actually implement the first local URT in June 2016. ECASE requested Hala to arrange for a meeting with the Ministry of Scientific Research to introduce EiPIC as a project activity and solicit the interest of local Egyptian scientists in the program. Hala promised to leverage support from Mr. Amr Salama and coordinate for a meeting when Frederic is in country. In this meeting Hala stressed the need for training manuals produced by ECASE to document the training currently taking place, review with PAT and present to the MoE.

November 23

A meeting at the ECASE office with Hala ElSerafy, Mr. Mamdouh Fadil, ESP COP, Mr. Yasser Youssef, ESP Technical Director, and Ms. Gehan Abdel Sayed, BOT & Science Club Manager, about science clubs

140 science clubs in 15 governorates

ESP needs a sponsor for science clubs

the involvement of TDC is discussed and explored lamoulou as head of STEM Unit can support the science clubs how can science clubs be scaled up under ECASE supported by MOE

December 15

A meeting was held with Hala ElSerafy at the ECASE office to push for payment of teachers which did not take place since September and the publishing of the ECASE recruitment advertisement on the PAT website. The teachers are frustrated and this is affecting their performance, attending online support and in country training. ECASE also discussed the efforts made to collect a list of approved books by the MoE in Math, Science and English to bring to preparatory schools as an introduction to STEM to help ECASE's outreach efforts. ECASE requested Hala to make appointments to visit the governorates to explore the possibilities of opening new schools in September. ECASE complained about the status of Information technology equipment and networks furnished by ECASE and have not been well maintained at the schools which will necessitate of ECASE implementing a maintenance check to repair all equipment and networks before the start of the new semester. Hala requested a memo to be drafted and sent to her to send to the Minister to commission the support of TDC to assist ECASE in three issues: The Fab Lab training, the transfer of Google Drive to the Ministry and the e STEM Online. A memo was drafted and sent to UASID after the meeting to facilitate the introduction of TDC involvement upon the Minister's request. Travel requests for Sara Leiken, Deborah Pomeroy and Justin Duffy were all presented to gain approval and Hala stopped travel until the training manuals are in a better shape.

December 18

A meeting was held at USAID with Ms. Seba Auda, Ms. Soad Saada and Hala ElSerafy to review the project's AIP and discuss USAID's request to change ECASE's PMP for the current year to match USAID's new indicators.

December 29

Hala ElSerafy met at our office with Jeff McClellan where Jeff suggested the design of a rubric to help implement the Classroom Observation Scale. Hala would like the Ministry to sign protocols with Universities to provide capstone evaluators at no cost. ECASE will work with private sector representatives who are specialized in fields relevant to the students' projects to also assist as capstone evaluators. ECASE indicated that it is working with the STEM Unit to expand its short list of enthusiastic members to help assist in participating in other project activities. ECASE asked about the visits for the governorates. We also requested an approval for the upcoming visit by Mr. Donald Steinberg the President of World Learning, his schedule was sent to Hala in advance. Ms. Dina El Tabey.